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HS-803-832

ERFORMANCE CHARACTERISTICS OF AUTOMOTIVE ENGINES IN THE UNITED STATES

Third Series - Report No. 3
1978 AMC, 121 CID (2.0 Liters), 2V

Don E. Koehler

U.S.DEPARTMENT OF ENERGY
BARTLESVILLE ENERGY TECHNOLOGY CENTER
P.O.Box 1398
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DEPARTMENT OF
TRANSPORTATION

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INTERIM REPORT

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U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
Office of Research and Development
Washington DC 20590

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16. Abstract

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PREFACE

This report, prepared by the U.S. Department of Energy, Bartlesville Energy Technology Center for the U.S. Department of Transportation, Transportation Systems Center, Energy Technology Branch, Cambridge, Mass., presents results of experimental work to obtain information on performance characteristics of an engine used in automobiles sold in the United States. The AMC 121 CID engine is one of a series of 15 engines to be tested in the current program. This is the third of the reports to be published covering work with those engines.

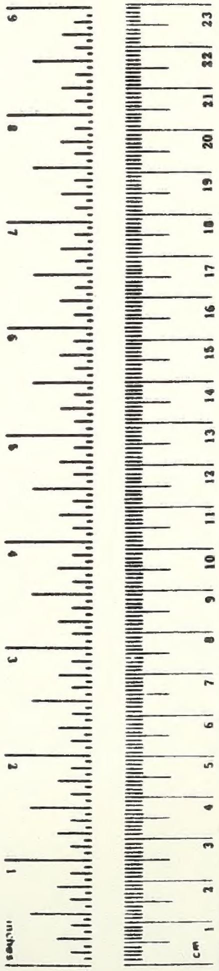
This project is funded by the National Highway Traffic Safety Administration, Office of Research and Development, Office of Passenger Vehicle Research, Technology Assessment Division.

James A. Kidd, Jr. and Ralph G. Colello of the U.S. Department of Transportation, Transportation Systems Center, are the technical monitors.

METRIC CONVERSION FACTORS

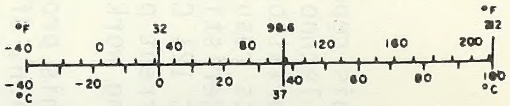
Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
		MASS (weight)		
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
		VOLUME		
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
		AREA		
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



1. INTRODUCTION

The objective of this program is to obtain engine performance data for estimating fuel economy and emissions for varied engine service and duty. The intent of this work done at Bartlesville Energy Technology Center is to provide basic engine characteristic data required as input for engineering calculations of fuel consumption and emissions involving ground transportation.

The data acquired from tests of a 1978 AMC 121 CID engine are presented in this report. This engine was intended for use in a 1978 forty-nine states (Federal) vehicle equipped with manual transmission. AMC uses the 121 CID engine in vehicles in the 2,750 to 3,000 lb weight class. The test results are sufficient to establish steady-state maps for fuel consumption and emissions (carbon monoxide, unburned hydrocarbons, and oxides of nitrogen) over the entire operating range of the engine.

2. ENGINE TEST REPORT

The engine test set-up included a complete mean tolerance engine (SAE definition) coupled to an eddy-current dynamometer. A cooling tower was used in place of the fan and radiator. The alternator was included but was not wired into the engine's electrical system. Emission control systems included an air pump, exhaust-gas-recirculation, positive crankcase ventilation, and a oxidation catalyst. The manufacturer's engine specifications are listed in Table 1.

Prior to testing, engine break-in consisted of 40 hours of operation at various speeds and loads representative of normal operation. Table 2 contains details of the break-in schedule. A single batch of unleaded regular grade gasoline was used throughout the break-in and tests. A detailed fuel analysis is given in Table 3. Engine testing began on January 18, 1978 and ended on January 27, 1978. During steady-state tests, the engine was operated at the following speed/load modes:

Speeds: 1,000; 1,500; 2,000; 2,500; 3,000; 3,800; 4,200; and 5,000 rpm

Loads: 0, 10, 25, 40, 60, 70, 90, 100 pct of full load (0, 10, 25, 60, and 75 pct points were repeated for all engine speeds)

Idle speed/load modes: 900 rpm -- 0, 10, 15 lb-ft
800 rpm -- 7 lb-ft

Over speed point: 5,250 rpm -- 75 lb-ft (WOT)

At the conclusion of the test, the engine was motored at 1,000; 1,500; and 2,000 rpm. At each of these speeds, the engine was motored with the throttle in the idle position ignition on; throttle in the idle position, ignition off; and wide-open-throttle (WOT) ignition off.

Total number of test modes......................	73
Total number of repeats.........................	44
Total number of motoring points.................	9
Total number of tests.........................	126

The following data were recorded for each test point:

Test number
Date
Barometric pressure, mm Hg
Dew point, °F
Inlet air temperature, °F
Speed, rpm

Torque, lb-ft -- Daytronics strain gauge load cell
Fuel rate, lb/hr -- Fluidyne positive displacement fuel flow meter
Ignition timing, °BTC
Manifold vacuum, in. Hg
Throttle angle, degrees
CO, pct -- Beckman NDIR
CO_2, pct -- Beckman NDIR
O_2, pct -- Beckman polarographic detector
HC, ppmC -- Custom-built heated flame ionization detector
NO_x, ppm -- Thermo-Electron chemiluminescent detector
Oil temperature, °F
Oil pressure, psig
Coolant temperature, °F
Exhaust temperature, °F
Exhaust pressure, in. H_2O
Intake manifold temperature, °F
Exhaust-gas-recirculation rate as determined by the intake manifold, CO_2

The following equations were used in calculating power, air/fuel ratio, absolute humidity, and mass emission rates of carbon monoxide (CO), unburned hydrocarbons (HC), and oxides of nitrogen (NO_x):

1. Partial pressure of water vapor in intake air (millimeters of mercury):

$$P = \exp\left[18.717 - \frac{7308.1}{393 + D}\right]$$

where D = Dew point, °F

2. Absolute humidity (grains moisture per pound dry air):

$$H = \frac{4347.8(P)}{B - P}$$

where B = Barometric pressure, mm Hg

3. Humidity correction factor (dimensionless):

$$K_H = \frac{1}{1 - 0.0047(H - 75)}$$

Note: This factor is used to correct the NO_x mass emission rate to a standard humidity of 75 grains moisture per pound dry air.

4. Stoichiometric air/fuel ratio (dimensionless):

$$AF_s = \frac{69(2 + \frac{x}{2} - y)}{MW_{fuel}}$$

where x = hydrogen-carbon ratio of fuel
y = oxygen-carbon ratio of fuel
MW_{fuel} = fuel molecular weight per carbon atom
= 12.01115 + 1.00797x + 16.00000y

5. Hydrogen concentration in raw exhaust (percent):

$$H_2 = \frac{x(CO)(CO + CO_2)}{2(CO + 3CO_2)}$$

where CO = Carbon monoxide concentration (percent)
CO_2 = Carbon dioxide concentration (percent)

Note: This equation assumes a water-gas shift equilibrium constant

$$\frac{(CO)(H_2O)}{(CO_2)(H_2)} = 3$$

6. Correction factor for emission concentrations from wet basis to dry basis (dimensionless):

$$C_W = 1 + \frac{(\frac{x}{2})(CO + CO_2) - H_2}{100}$$

Note: In these tests only HC is measured on a wet basis. All other species are measured on a dry basis.

7. Air/Fuel ratio (dimensionless):

$$AF = \frac{AF_s}{2 + \frac{x}{2} - y}\left[\frac{(1 + \frac{x}{2} - y)(CO) + (2 + \frac{x}{2} - y)(CO_2) + 2(O_2) + \frac{NO_x}{10^4} - H_2}{CO + CO_2 + C_W(\frac{HC}{10^4})}\right]$$

where O_2 = oxygen concentration (percent)
NO_x = oxides of nitrogen (ppm)
HC = unburned hydrocarbon concentration (ppmC)

8. Exhaust flow (pounds per hour):

$$M_{EX} = M_F(1 + AF)$$

where M_F = fuel flow rate (pounds per hour)

9. Carbon monoxide mass emission rate (grams per hour):

$$M_{CO} = \left(\frac{MW_{CO}}{MW_f}\right) \left[\frac{(\%CO)\,(M_f)}{\%CO + \%CO_2 + C_w(\%HC)}\right] (453.59237)$$

MW_{CO} = molecular weight of CO (28.01115)
MW_f = molecular weight of fuel (12.01115 + 1.00797x + 16.00000y)
M_f = fuel rate in lbs/hour
%HC = HC(ppm)/10^4

10. Unburned hydrocarbon mass emission rate (grams per hour):

$$M_{HC} = \left(\frac{MW_{HC}}{MW_f}\right) \left[\frac{(\%HC)\,(M_f)\,(C_w)}{\%CO + \%CO_2 + C_w(\%HC}\right] (453.59237)$$

MW_{HC} = molecular weight of hydrocarbon
= 12.01115 + 1.00797x + 16.00000y

11. Oxides of mitrogen mass emission rate (grams per hour):

$$M_{NO_x} = \left(\frac{MW_{NO_x}}{MW_f}\right) \left[\frac{\%NO_x + M_f}{\%CO + \%CO_2 + C_w(\%HC)}\right] (453.59237)$$

MW_{NO_x} = molecular weight of NO_2 = 46.0055

12. Power (brake horsepower corrected to a standard barometric pressure of 736.6 mm Hg and a standard temperature of 85° F):

$$HP = \left(\frac{N\,(T)}{5252.113}\right) \left(\frac{736.6}{B - P}\right) \sqrt{\frac{t + 460}{545}}$$

where N = engine speed (revolutions per minute)
T = brake torque (lb-Ft)
t = air temperature (°F)
B = barometric pressure (mm Hg)
P = partial pressure of water vapor in intake air (mm Hg)

3. DISCUSSION OF TEST RESULTS

Maximum corrected brake horsepower, maximum torque, and brake specific fuel consumption (bsfc) are plotted as a function of engine speed at WOT (Figure 1). The maximum brake horsepower produced by the engine was similar to the value quoted in Table 1. The maximum torque produced was slightly lower than the value quoted in Table 1 and was produced at a slightly lower speed. Fuel rates were found to be nearly a linear function of power for all speeds except for maximum power at each speed (Figure 2). Fuel rates were repeatable for all speeds duplicated. Air-fuel ratio decreased as power (BHP) increased (Figure 3).

Emissions of carbon monoxide (CO), hydrocarbon (HC), and oxides of nitrogen (NO_x) are plotted as a function of power for all engine speeds (Figures 4, 5, 6). Carbon monoxide and HC tend to remain at low levels for all speeds except at WOT. At WOT operation rich air-fuel ratios cause the CO and HC to increase significantly. The NO_x emissions were repeatable for most engine test modes. Additional tests were made at certain test modes due to the non-repeatability of the NO_x emission levels. The results from the additional testing indicate that the modes are at critical operating condition; thus causing significant differences in the NO_x emissions.

4. CONCLUSIONS

The experimental work to obtain engine performance data for a 1978 AMC 121 CID engine has been completed, and these data are presented in the tables accompanying this report.

TABLE 1. MANUFACTURER'S ENGINE SPECIFICATIONS

Displacement, cubic inches	121
Maximum horsepower, bhp @ 5,000 rpm	80
Maximum torque, lb-ft @ 2,800 rpm	105
Bore and stroke, inches	3.41 - 3.23
Configuration	in-line 4 cylinder
Compression ratio	8.2 to 1
Firing order	1-3-4-2
Ignition timing at idle speed, °BTDC @ 900 rpm	12
Block material	cast iron
Head material	cast aluminum
Number of crankshaft main bearings	5
Number of compression rings/piston	2
Number of oil rings/piston	1
Cam drive type	belt
Valve lift:	
Intake, inches	0.402
Exhaust, inches	0.382
Valve timing:	
Intake opens, °BTC	41.8
Intake closes, °ABC	77.8
Exhaust opens, °BBC	75.3
Exhaust closes, °ATC	63.3
Engine weight, lb	340
Spark plug gap, inches	0.035
Exhaust-gas-recirculation system:	
Valve type	tapered stem
Control signal	ported vacuum
Point of discharge	intake manifold
Crankcase emission control:	
Control method	positive crankcase ventilation
Point of discharge	intake manifold
Carburetor type	2V downdraft
Distributor specifications:*	
Centrifugal advance, begins, ° @ 1,200 rpm	0
Centrifugal advance, intermediate, ° @ 1,950 rpm	20
Centrifugal advance, full, ° @ 4,400 rpm	34
Vacuum advance, begins, ° @ 3 in Hg	0
Vacuum advance, maximum, ° @ 9.6 in Hg	18
Carburetor number	8163
Distributor number	0-231-170-206
EGR number	7030881

*Engine rpm, crankshaft degrees

TABLE 2. ENGINE BREAK-IN SCHEDULE

Simulated vehicle speed, mph	Engine speed, rpm	Intake manifold vacuum, in Hg	Fraction of time in mode
Idle	650	15	1/10
20	1,100	13	"
30	1,500	9.5	"
40	1,900	10.5	"
50	2,325	9	"
60	2,800	9	"
25	1,300	12.5	"
35	1,700	12	"
45	2,100	9.5	"
55	2,550	8.5	"

Mileage per cycle = 90.
Total mileage accumulated over 40 hours break-in period = 1,440.

TABLE 3. FUEL ANALYSIS

Fuel No	7718
Research octane No	91.8
Motor octane No	84.0
Specific gravity	0.717
API gravity, degrees	65.9
Distillation, °F:	
10 pct evaporated	123
50 pct "	209
95 pct "	402
100 pct "	413
Reid vapor pressure, psi	11.26
FIA analysis, pct:	
Aromatics	9
Olefins	15
Paraffins	76
Sulfur, pct	0.016
Lead, grams per gallon	Trace
Hydrogen/carbon atomic ratio	2.038

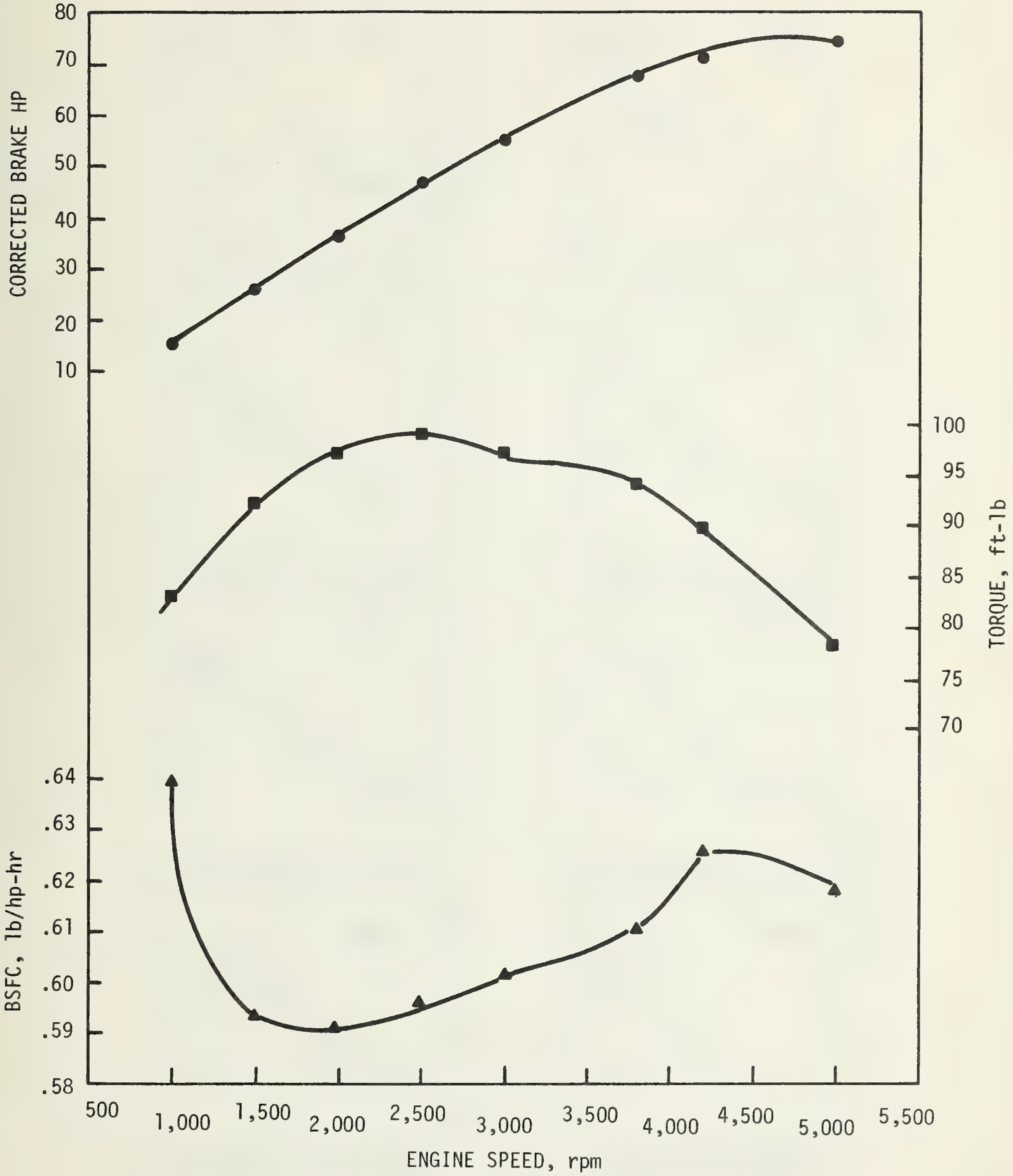


FIGURE 1. Brake Specific Fuel Consumption, Torque, and Brake Horsepower Versus Engine rpm at Wide-Open-Throttle--AMC 121 CID Engine.

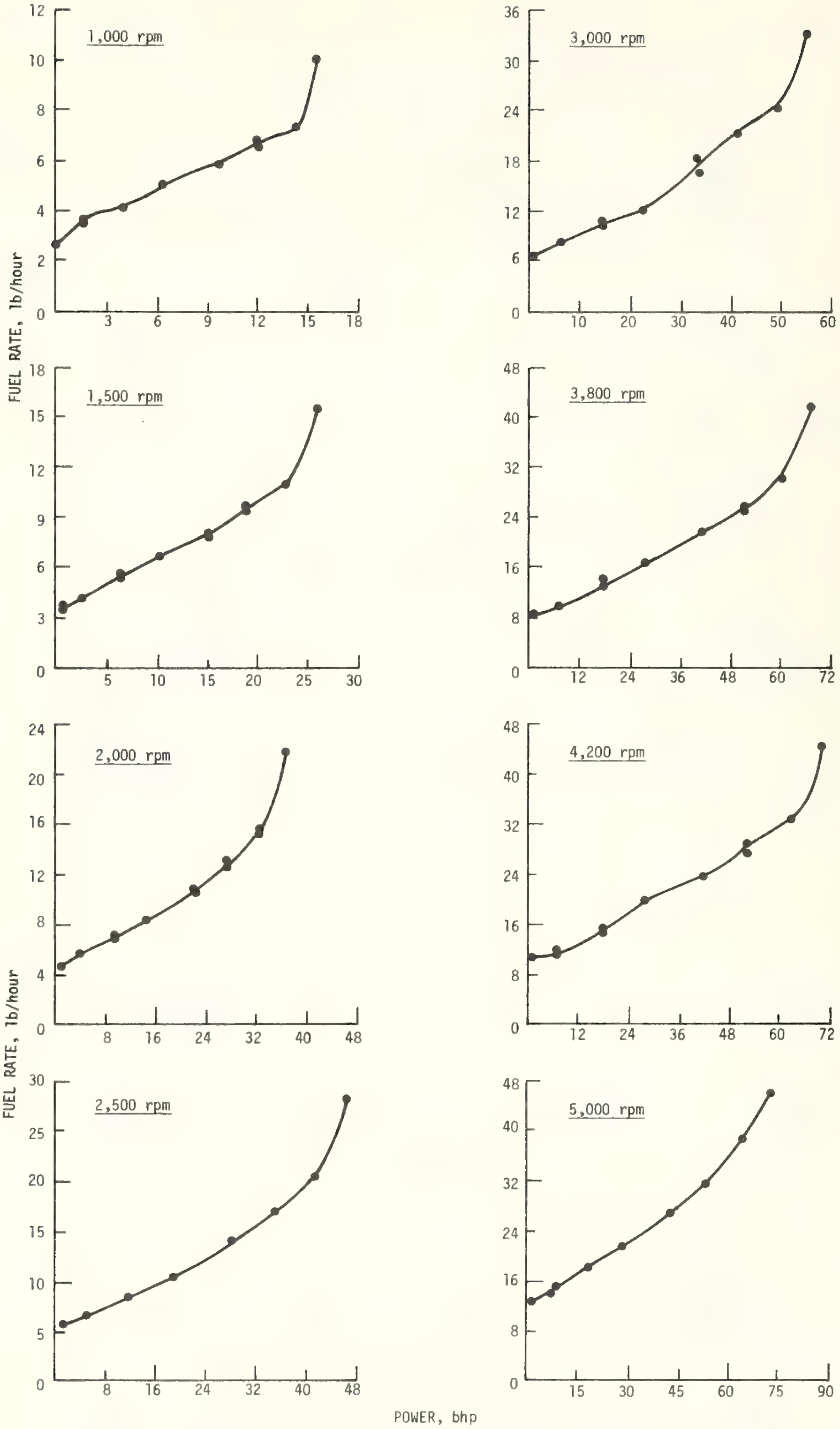


FIGURE 2. Fuel Rate Versus Power at Various Speed and Load Conditions--AMC 121 CID Engine.

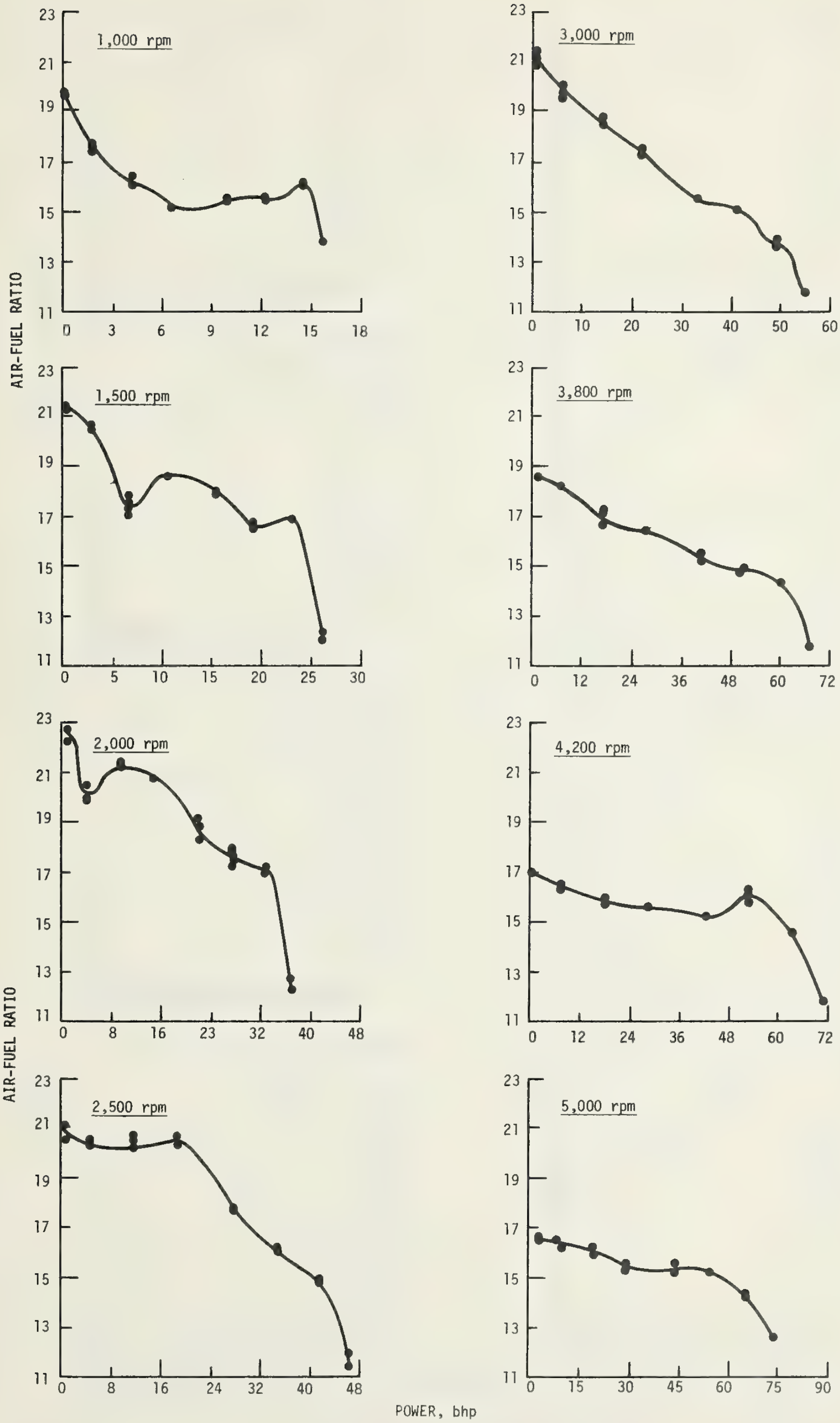


FIGURE 3. Air Fuel Ratio Versus Power at Various Speed and Load Conditions--AMC 121 CID Engine.

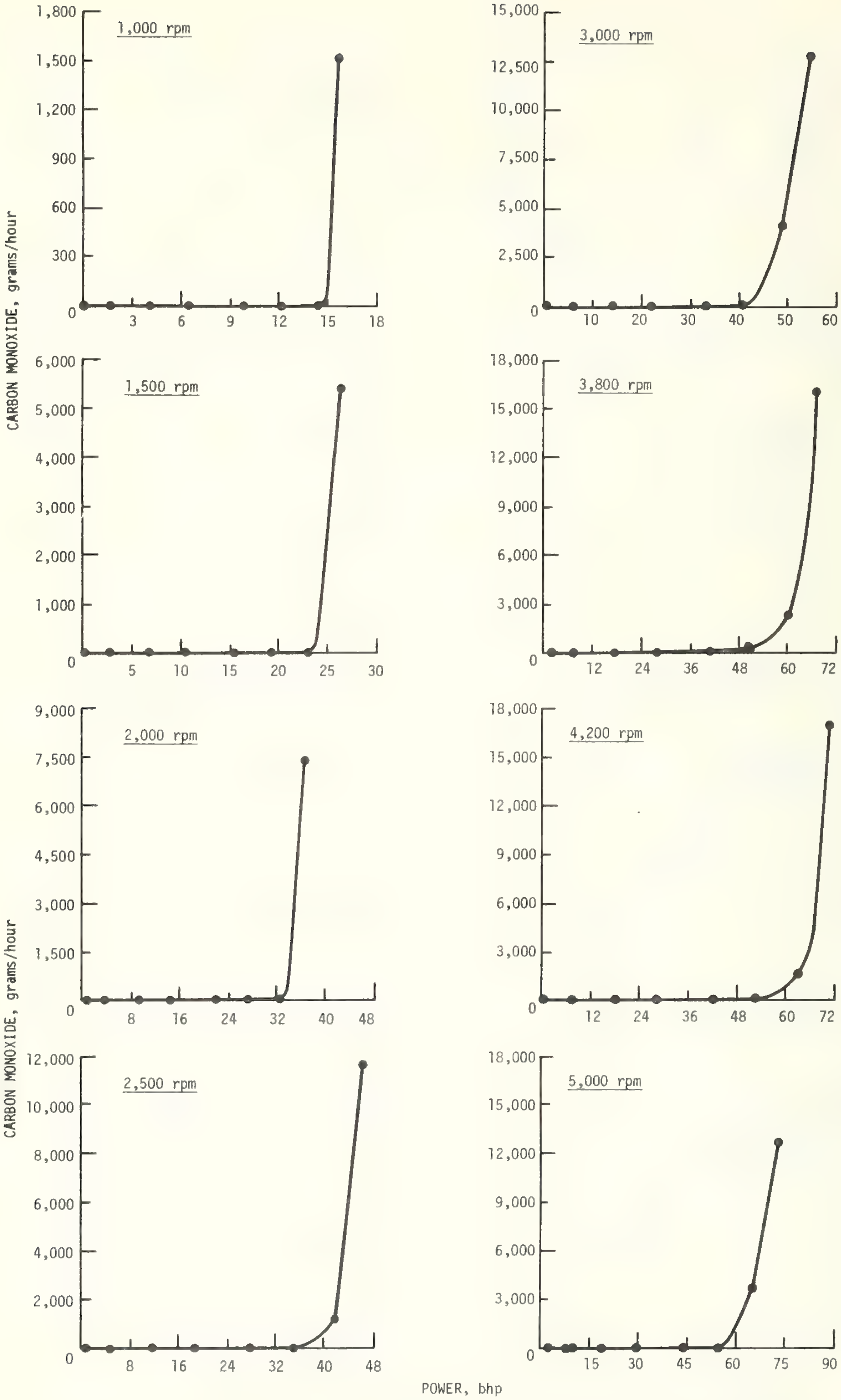


FIGURE 4. Carbon Monoxide Emissions Versus Power at Various Speed and Load Conditions--AMC 121 CID Engine.

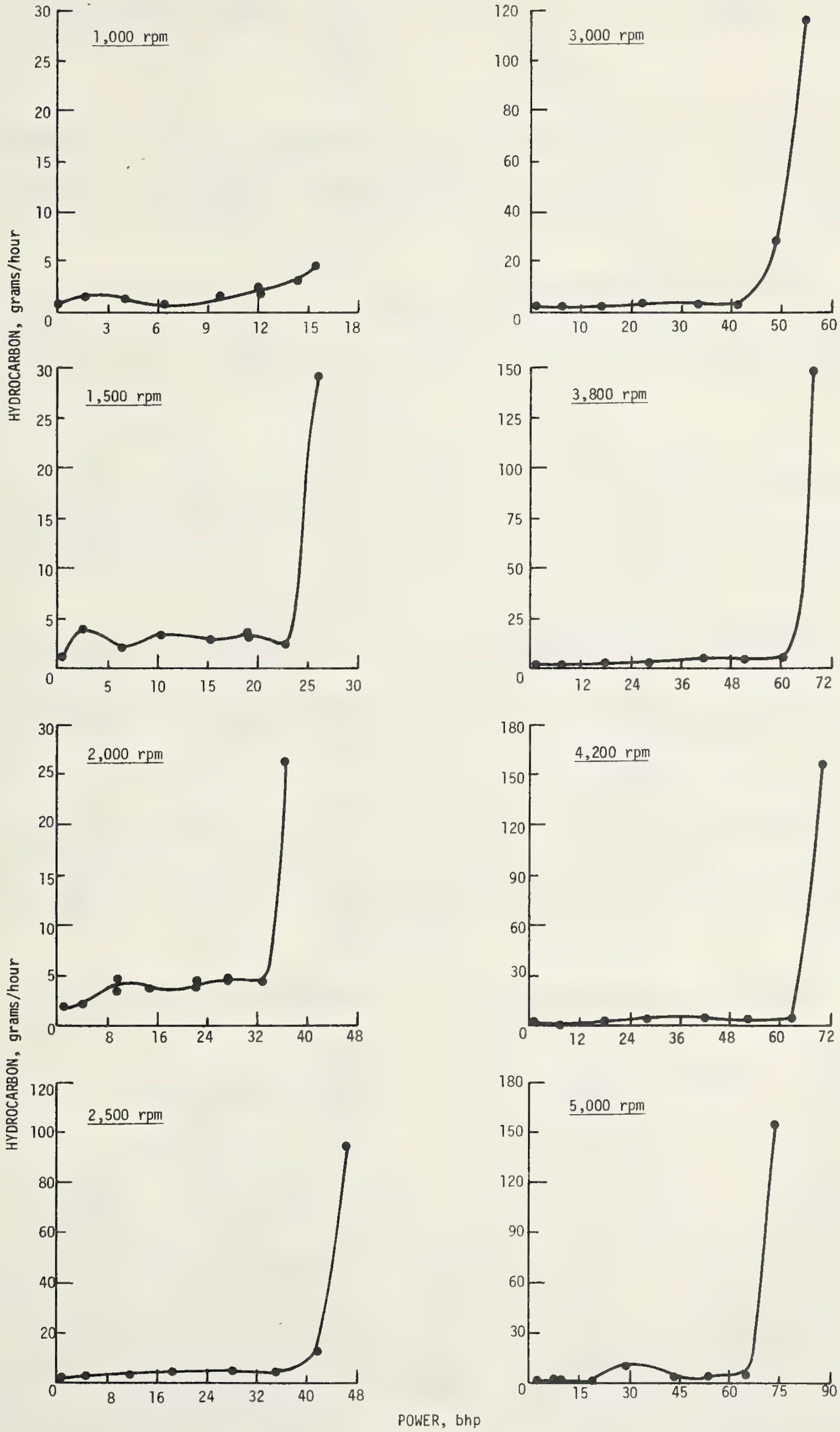


FIGURE 5. Hydrocarbon Emissions Versus Power at Various Speed and Load Conditions--AMC 121 CID Engine.

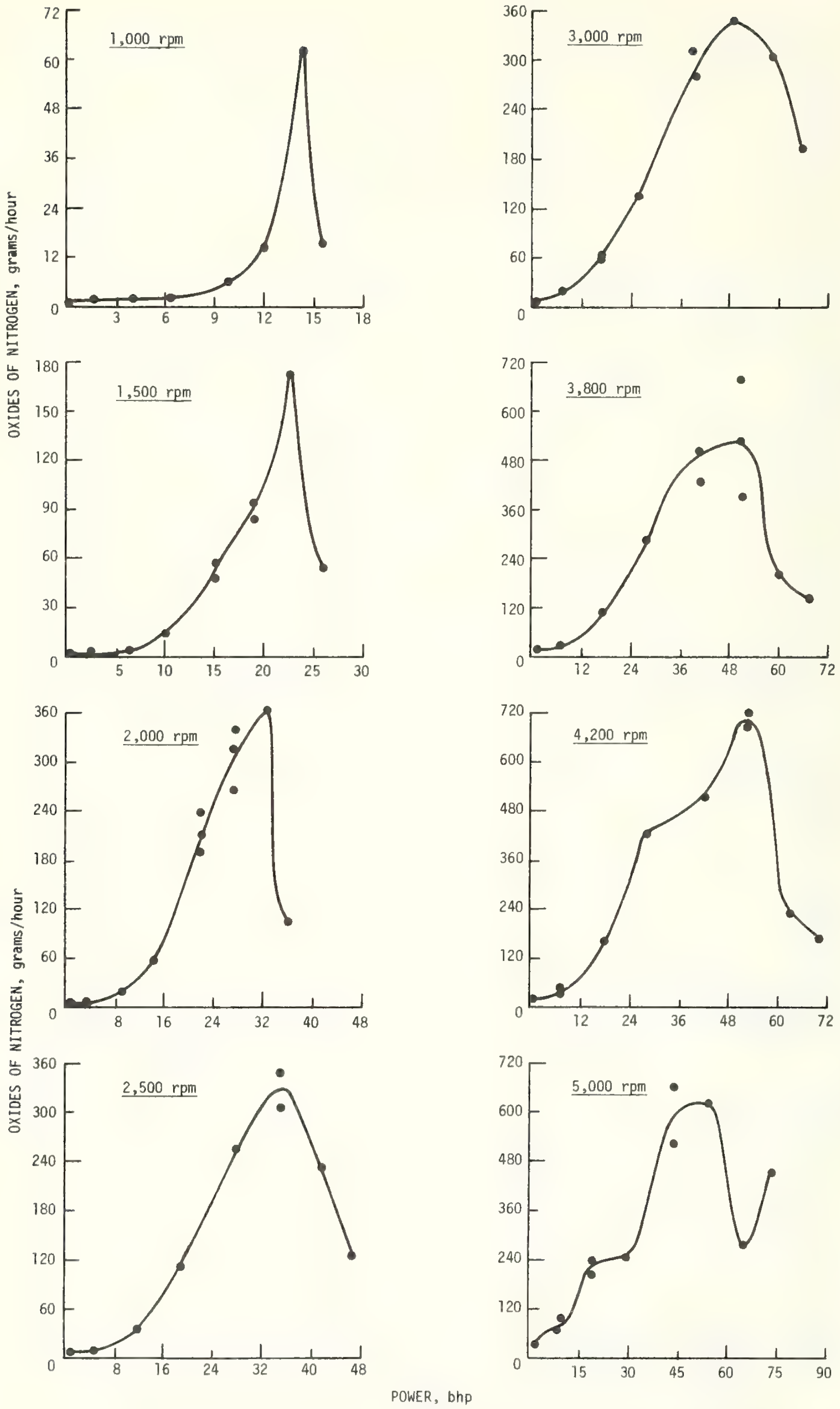


FIGURE 6. Oxides of Nitrogen Emissions Versus Power at Various Speed and Load Conditions--AMC 121 CID Engine.

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	1.01	1.02	2.01	2.02	3.01	3.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/18/78	1/18/78	1/18/78	1/18/78	1/18/78	1/18/78
BAROMETER, MMHG	751.9	751.9	751.9	751.9	751.9	751.9
HUMIDITY, GRAINS/LB	37	37	37	37	37	37
TEMPERATURE, F	82	82	80	80	80	80
ENGINE SPEED, RPM	900	900	900	900	900	900
TORQUE, FT-LB	.0	.0	10.1	10.1	15.0	15.0
POWER, BHP*	.0	.0	1.7	1.7	2.5	2.5
FUEL RATE, LB/HR	2.2	2.2	2.7	2.8	3.3	3.4
IGNITION TIMING, DEG BTDC	12.0	12.0	13.0	13.0	12.0	12.0
MANIFOLD VACUUM, IN HG	20.2	20.2	18.5	18.5	17.5	17.5
THROTTLE ANGLE, DEG	.0	.0	1.3	1.3	1.8	1.8
INTAKE MAN. TEMP., F	80	80	76	76	78	78
CONCENTRATIONS, DRY BASIS						
CO, %	.9089	.0063	1.4797	.0065	1.7085	.0072
CO2, %	8.76	9.73	9.79	11.41	10.32	12.02
O2, %	7.82	7.21	5.88	4.84	4.92	4.00
HC, PPMC	734	76	691	56	713	44
NOX, PPM	24	33	32	52	37	55
AIR/FUEL RATIO	21.95	22.06	18.93	18.96	17.76	18.07
EMISSION RATES, G/HR						
CO	184.4	1.3	321.8	1.4	421.2	1.8
HC	7.5	.8	7.5	.6	8.8	.6
NOX+	.7	.9	1.0	1.6	1.3	1.9
OIL TEMPERATURE, F	164	164	166	166	168	168
OIL PRESSURE, PSI	47	47	45	45	44	44
COOLANT TEMPERATURE, F	176	176	179	179	180	180
EXHAUST PRESSURE, IN. H2O	.0	.0	2.0	.0	2.0	1.0
EXHAUST TEMPERATURE, F	683	500	796	620	837	712

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	4.01	4.02	5.01	5.02	6.01	6.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/18/78	1/18/78	1/26/78	1/26/78	1/18/78	1/19/78
BAROMETER, MMHG	751.9	751.9	750.0	750.0	754.3	754.3
HUMIDITY, GRAINS/LB	37	37	29	29	31	31
TEMPERATURE, F	81	81	81	81	118	118
ENGINE SPEED, RPM	800	800	1000	1000	1000	1000
TORQUE, FT-LB	7.2	7.2	85.0	85.0	79.0	79.0
POWER, BHP*	1.1	1.1	15.8	15.8	14.6	14.6
FUEL RATE, LB/HR	2.5	2.4	10.1	10.1	7.4	7.4
IGNITION TIMING, DEG BTDC	12.0	12.0	11.0	11.0	17.0	17.0
MANIFOLD VACUUM, IN HG	19.0	19.0	.5	.5	3.4	3.4
THROTTLE ANGLE, DEG	.0	.0	65.5	65.5	18.0	18.0
INTAKE MAN. TEMP., F	79	79	124	124	134	134
CONCENTRATIONS, DRY BASIS						
CO, %	1.2667	.0057	5.6221	2.5456	1.5925	.0066
CO2, %	9.57	10.95	9.24	12.88	11.31	13.53
O2, %	6.30	5.51	2.77	.21	3.22	1.63
HC, PPMC	739	41	2032	165	2266	133
NOX, PPM	27	40	699	191	897	917
AIR/FUEL RATIO	19.60	19.74	13.78	13.82	16.18	16.01
EMISSION RATES, G/HR						
CO	262.8	1.2	3418.8	1510.2	813.9	3.3
HC	7.7	.4	62.1	4.9	58.2	3.3
NOX+	.8	1.1	57.4	15.3	62.4	61.8
OIL TEMPERATURE, F	169	169	207	207	172	172
OIL PRESSURE, PSI	37	37	38	38	44	44
COOLANT TEMPERATURE, F	180	180	186	186	188	188
EXHAUST PRESSURE, IN. H2O	1.0	.0	13.0	7.0	8.0	5.0
EXHAUST TEMPERATURE, F	716	710	920	1320	800	790

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	7.01	7.02	8.01	8.02	9.01	9.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/20/78	1/20/78	1/19/78	1/19/78
BAROMETER, MMHG	754.3	754.3	754.4	754.4	754.3	754.3
HUMIDITY, GRAINS/LB	31	31	44	44	31	31
TEMPERATURE, F	129	129	99	99	75	75
ENGINE SPEED, RPM	1000	1000	1000	1000	1000	1000
TORQUE, FT-LB	66.0	66.0	53.0	53.0	35.0	35.0
POWER, BHP*	12.2	12.2	9.9	9.9	6.5	6.5
FUEL RATE, LB/HR	6.9	6.9	5.9	5.9	5.1	5.1
IGNITION TIMING, DEG BTDC	17.0	17.0	19.0	19.0	29.0	29.0
MANIFOLD VACUUM, IN HG	4.8	4.8	7.0	7.0	10.0	10.0
THROTTLE ANGLE, DEG	14.0	14.0	10.1	10.1	5.3	5.3
INTAKE MAN. TEMP., F	141	141	159	159	156	156
CONCENTRATIONS, DRY BASIS						
CO, %	2.6989	.0068	2.6004	.0006	4.5348	.0086
CO2, %	10.78	14.00	10.85	13.92	9.00	14.37
O2, %	3.35	1.20	3.13	1.10	4.18	.56
HC, PPMC	2247	115	2669	83	2556	46
NOX, PPM	197	228	86	102	25	43
AIR/FUEL RATIO	15.63	15.65	15.47	15.58	15.19	15.19
EMISSION RATES, G/HR						
CO	1230.3	3.0	1013.0	.2	1527.2	2.8
HC	51.4	2.6	52.2	1.6	43.2	.7
NOX+	12.2	13.8	4.8	5.6	1.2	1.9
OIL TEMPERATURE, F	170	170	183	183	163	163
OIL PRESSURE, PSI	45	45	43	43	46	46
COOLANT TEMPERATURE, F	186	186	185	185	183	183
EXHAUST PRESSURE, IN. H2O	7.0	4.0	6.0	4.0	6.0	2.0
EXHAUST TEMPERATURE, F	763	803	812	963	660	920

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	10.01	10.02	11.01	11.02	12.01	12.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	755.0	755.0	755.0	755.0
HUMIDITY, GRAINS/LB	44	44	30	30	30	30
TEMPERATURE, F	94	94	74	74	74	74
ENGINE SPEED, RPM	1000	1000	1000	1000	1000	1000
TORQUE, FT-LB	22.0	22.0	9.0	9.0	1.2	1.2
POWER, BHP*	4.1	4.1	1.7	1.7	.2	.2
FUEL RATE, LB/HR	4.2	4.1	3.6	3.6	2.7	2.6
IGNITION TIMING, DEG BTDC	22.0	22.0	17.0	17.0	13.5	13.5
MANIFOLD VACUUM, IN HG	13.0	13.0	15.8	15.8	20.5	20.5
THROTTLE ANGLE, DEG	4.0	4.0	1.5	1.5	.3	.3
INTAKE MAN. TEMP., F	170	170	143	143	148	148
CONCENTRATIONS, DRY BASIS						
CO, %	2.4331	.0009	1.2588	.0049	.8997	.0054
CO2, %	10.54	13.07	10.97	12.48	9.96	11.00
O2, %	3.72	2.21	4.32	3.52	6.01	5.61
HC, PPMC	1826	90	649	102	427	71
NOX, PPM	35	47	29	41	25	34
AIR/FUEL RATIO	16.12	16.46	17.50	17.56	19.61	19.80
EMISSION RATES, G/HR						
CO	696.0	.3	333.3	1.3	200.3	1.2
HC	26.2	1.3	8.6	1.3	4.8	.8
NOX+	1.4	1.9	1.0	1.5	.8	1.0
OIL TEMPERATURE, F	179	179	158	158	159	159
OIL PRESSURE, PSI	47	43	48	48	50	50
COOLANT TEMPERATURE, F	183	183	181	181	181	181
EXHAUST PRESSURE, IN. H2O	5.0	2.0	6.0	1.0	5.0	1.0
EXHAUST TEMPERATURE, F	812	922	800	580	775	535

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	13.01	13.02	14.01	14.02	15.01	15.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/25/78	1/25/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	740.3	740.3	755.0	755.0	755.0	755.0
HUMIDITY, GRAINS/LB	33	33	30	30	30	30
TEMPERATURE, F	78	78	78	78	79	79
ENGINE SPEED, RPM	1500	1500	1500	1500	1500	1500
TORQUE, FT-LB	93.0	93.0	83.0	83.0	69.0	69.0
POWER, BHP*	26.3	26.3	23.0	23.0	19.1	19.1
FUEL RATE, LB/HR	15.6	15.6	11.0	11.0	9.8	9.8
IGNITION TIMING, DEG BTDC	17.5	17.5	21.0	21.0	25.0	25.0
MANIFOLD VACUUM, IN HG	.5	.5	3.5	3.5	5.4	5.4
THROTTLE ANGLE, DEG	65.0	65.0	26.3	26.3	19.5	19.5
INTAKE MAN. TEMP., F	114	114	122	122	131	131
CONCENTRATIONS, DRY BASIS						
CO, %	6.7274	6.5956	.5358	.0059	.9385	.0065
CO2, %	9.15	10.47	12.14	12.81	11.84	13.14
O2, %	1.23	.04	3.03	2.68	3.41	2.51
HC, PPMC	2147	703	943	63	1444	100
NOX, PPM	500	485	1692	1622	909	911
AIR/FUEL RATIO	12.36	12.04	16.82	16.92	16.79	16.71
EMISSION RATES, G/HR						
CO	5892.2	5424.9	417.8	4.6	640.1	4.4
HC	94.4	29.1	36.9	2.4	49.4	3.4
NOX+	60.3	54.9	179.5	170.6	84.3	83.5
OIL TEMPERATURE, F	192	192	183	183	185	185
OIL PRESSURE, PSI	54	54	60	60	59	59
COOLANT TEMPERATURE, F	186	186	189	189	188	188
EXHAUST PRESSURE, IN. H2O	23.0	14.0	16.0	14.0	15.0	12.0
EXHAUST TEMPERATURE, F	1035	1260	900	740	965	775

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	16.01	16.02	17.01	17.02	18.01	18.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	755.0	755.0	755.0	755.0	755.0	755.0
HUMIDITY, GRAINS/LB	30	30	30	30	30	30
TEMPERATURE, F	78	78	77	77	75	75
ENGINE SPEED, RPM	1500	1500	1500	1500	1500	1500
TORQUE, FT-LB	55.0	55.0	37.0	37.0	23.0	23.0
POWER, BHP*	15.3	15.3	10.3	10.3	6.4	6.4
FUEL RATE, LB/HR	8.1	8.2	6.7	6.7	5.8	5.7
IGNITION TIMING, DEG BTDC	33.0	33.0	39.0	39.0	39.0	39.0
MANIFOLD VACUUM, IN HG	7.3	7.3	9.7	9.7	13.8	13.8
THROTTLE ANGLE, DEG	14.5	14.5	9.8	9.8	5.5	5.5
INTAKE MAN. TEMP., F	149	149	166	166	176	176
CONCENTRATIONS, DRY BASIS						
CO, %	.2051	.0040	.1545	.0063	2.3419	.0069
CO2, %	11.69	12.07	11.33	11.63	9.99	12.56
O2, %	4.18	3.78	4.84	4.49	4.68	3.18
HC, PPMC	1325	93	1519	126	1493	95
NOX, PPM	567	583	214	210	44	61
AIR/FUEL RATIO	17.97	17.89	18.62	18.58	17.03	17.28
EMISSION RATES, G/HR						
CO	124.8	2.4	80.1	3.3	977.4	2.8
HC	40.5	2.9	39.5	3.3	31.3	2.0
NOX+	46.9	48.4	15.1	14.8	2.5	3.4
OIL TEMPERATURE, F	182	182	180	180	178	178
OIL PRESSURE, PSI	59	59	60	60	61	61
COOLANT TEMPERATURE, F	187	187	186	186	185	185
EXHAUST PRESSURE, IN. H2O	14.0	10.0	12.0	9.0	11.0	8.0
EXHAUST TEMPERATURE, F	890	680	855	610	820	728

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	19.01	19.02	20.01	20.02	21.01	21.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/23/78	1/23/78	1/19/78	1/19/78	1/18/78	1/18/78
BAROMETER, MMHG	746.1	746.1	754.4	754.4	751.9	751.9
HUMIDITY, GRAINS/LB	49	49	32	32	35	35
TEMPERATURE, F	81	81	75	75	80	80
ENGINE SPEED, RPM	1500	1500	1500	1500	2000	2000
TORQUE, FT-LB	9.0	9.0	2.0	2.0	99.0	99.0
POWER, BHP*	2.5	2.5	.6	.6	36.9	36.9
FUEL RATE, LB/HR	4.3	4.2	3.7	3.8	21.9	21.7
IGNITION TIMING, DEG BTDC	36.0	36.0	23.5	23.5	29.0	29.0
MANIFOLD VACUUM, IN HG	15.2	15.2	19.2	19.2	.3	.3
THROTTLE ANGLE, DEG	4.9	4.9	2.3	2.3	71.5	71.5
INTAKE MAN. TEMP., F	139	139	161	161	114	114
CONCENTRATIONS, DRY BASIS						
CO, %	.2110	.0038	.6063	.0057	7.3600	6.4800
CO2, %	9.80	11.06	9.74	10.39	8.96	10.67
O2, %	7.00	6.41	7.13	6.87	2.01	.09
HC, PPMC	4262	213	471	74	1973	458
NOX, PPM	52	66	34	41	785	654
AIR/FUEL RATIO	20.66	20.46	21.09	21.28	12.60	12.15
EMISSION RATES, G/HR						
CO	78.5	1.3	195.8	1.9	8830.8	7371.4
HC	79.6	3.7	7.6	1.2	118.9	26.2
NOX+	2.8	3.3	1.5	1.9	130.7	103.2
OIL TEMPERATURE, F	174	174	177	177	202	202
OIL PRESSURE, PSI	64	64	61	61	65	65
COOLANT TEMPERATURE, F	184	184	184	184	186	186
EXHAUST PRESSURE, IN. H2O	4.0	2.0	9.0	6.0	40.0	25.0
EXHAUST TEMPERATURE, F	804	777	870	660	1054	1280

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	22.01	22.02	23.01	23.02	24.01	24.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	32	32	32	32	32	32
TEMPERATURE, F	79	79	80	80	79	79
ENGINE SPEED, RPM	2000	2000	2000	2000	2000	2000
TORQUE, FT-LB	89.0	89.0	74.0	74.0	59.5	59.5
POWER, BHP*	32.9	32.9	27.4	27.4	22.0	22.0
FUEL RATE, LB/HR	15.5	15.2	12.4	13.1	10.7	10.7
IGNITION TIMING, DEG BTDC	35.0	35.0	41.0	41.0	46.0	46.0
MANIFOLD VACUUM, IN HG	3.6	3.6	5.8	5.8	8.0	8.0
THROTTLE ANGLE, DEG	33.2	33.2	23.7	23.7	18.0	18.0
INTAKE MAN. TEMP., F	121	121	134	134	149	149
CONCENTRATIONS, DRY BASIS						
CO, %	.9478	.0059	.5999	.0058	.1971	.0054
CO2, %	11.97	13.07	11.51	12.39	11.39	11.55
O2, %	3.36	2.93	4.33	3.64	4.97	4.98
HC, PPMC	819	84	1273	98	1102	106
NOX, PPM	2438	2505	1999	2034	1727	1639
AIR/FUEL RATIO	16.86	17.09	17.88	17.76	18.80	19.09
EMISSION RATES, G/HR						
CO	1018.7	6.2	550.3	5.5	162.2	4.5
HC	44.2	4.4	58.7	4.7	45.6	4.5
NOX+	358.9	359.8	251.2	264.9	194.7	187.8
OIL TEMPERATURE, F	193	193	199	199	196	196
OIL PRESSURE, PSI	65	65	65	65	65	65
COOLANT TEMPERATURE, F	189	189	188	188	186	186
EXHAUST PRESSURE, IN. H2O	27.0	17.0	25.0	16.0	22.0	14.0
EXHAUST TEMPERATURE, F	1100	890	1022	880	960	800

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	25.01	25.02	26.01	26.02	27.01	27.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	32	32	32	32	32	32
TEMPERATURE, F	77	77	76	76	76	76
ENGINE SPEED, RPM	2000	2000	2000	2000	2000	2000
TORQUE, FT-LB	39.5	39.5	25.0	25.0	10.0	10.0
POWER, BHP*	14.6	14.6	9.3	9.3	3.7	3.7
FUEL RATE, LB/HR	8.3	8.3	6.9	7.0	5.7	5.7
IGNITION TIMING, DEG BTDC	47.0	47.0	46.0	46.0	48.0	48.0
MANIFOLD VACUUM, IN HG	11.3	11.3	13.7	13.7	17.0	17.0
THROTTLE ANGLE, DEG	12.2	12.2	9.0	9.0	5.3	5.3
INTAKE MAN. TEMP., F	161	161	172	172	181	181
CONCENTRATIONS, DRY BASIS						
CO, %	.0715	.0050	.1173	.0057	.9717	.0046
CO2, %	10.57	10.75	10.23	10.49	9.86	10.94
O2, %	6.65	6.50	7.21	7.00	7.01	6.36
HC, PPMC	1332	106	1402	114	784	93
NOX, PPM	644	592	228	227	53	63
AIR/FUEL RATIO	20.67	20.74	21.29	21.34	20.42	20.49
EMISSION RATES, G/HR						
CO	49.5	3.5	69.7	3.4	458.7	2.1
HC	46.3	3.7	41.8	3.4	18.6	2.2
NOX+	61.1	56.2	18.6	18.6	3.4	4.0
OIL TEMPERATURE, F	193	193	188	188	185	185
OIL PRESSURE, PSI	66	66	66	66	67	67
COOLANT TEMPERATURE, F	185	185	184	184	182	182
EXHAUST PRESSURE, IN. H2O	17.0	11.0	14.0	9.0	12.0	7.0
EXHAUST TEMPERATURE, F	910	700	860	630	890	640

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	28.01	28.02	29.01	29.02	30.01	30.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/18/78	1/18/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	751.9	751.9	754.4	754.4
HUMIDITY, GRAINS/LB	32	32	35	35	32	32
TEMPERATURE, F	75	75	80	80	82	82
ENGINE SPEED, RPM	2000	2000	2500	2500	2500	2500
TORQUE, FT-LB	2.0	2.0	101.0	101.0	91.0	91.0
POWER, BHP*	.7	.7	47.0	47.0	42.1	42.1
FUEL RATE, LB/HR	4.7	4.8	28.0	28.0	20.3	20.5
IGNITION TIMING, DEG BTDC	48.0	48.0	33.0	33.0	37.0	37.0
MANIFOLD VACUUM, IN HG	19.0	19.0	.5	.5	3.6	3.6
THROTTLE ANGLE, DEG	3.6	3.6	71.5	71.5	39.2	39.2
INTAKE MAN. TEMP., F	175	175	112	112	120	120
CONCENTRATIONS, DRY BASIS						
CO, %	.5981	.0058	7.6400	8.3000	2.1304	.9198
CO2, %	9.33	9.84	9.18	9.68	12.50	13.92
O2, %	8.12	7.94	.90	.09	1.73	.48
HC, PPMC	979	87	2062	1339	1331	201
NOX, PPM	40	51	899	637	1959	1358
AIR/FUEL RATIO	22.22	22.70	11.90	11.42	14.92	14.74
EMISSION RATES, G/HR						
CO	251.9	2.6	11360.2	11598.1	2646.0	1144.9
HC	20.7	1.9	154.0	94.0	83.0	12.6
NOX+	2.3	3.1	185.5	123.5	333.3	231.5
OIL TEMPERATURE, F	182	182	216	216	203	203
OIL PRESSURE, PSI	68	68	66	66	68	68
COOLANT TEMPERATURE, F	181	181	189	189	190	190
EXHAUST PRESSURE, IN. H2O	11.0	7.0	50.0	30.0	38.0	24.0
EXHAUST TEMPERATURE, F	890	690	1164	1130	1190	1050

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	31.01	31.02	32.01	32.02	33.01	33.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	754.0	754.0	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	32	32	32	32	32	32
TEMPERATURE, F	85	85	84	84	81	81
ENGINE SPEED, RPM	2500	2500	2500	2500	2500	2500
TORQUE, FT-LB	76.0	76.0	60.5	60.5	40.5	40.5
POWER, BHP*	35.2	35.2	28.0	28.0	18.7	18.7
FUEL RATE, LB/HR	16.7	16.8	13.8	13.8	10.3	10.3
IGNITION TIMING, DEG BTDC	41.5	41.5	46.0	46.0	49.0	49.0
MANIFOLD VACUUM, IN HG	5.5	5.5	7.9	7.9	11.0	11.0
THROTTLE ANGLE, DEG	29.0	29.0	22.0	22.0	16.1	16.1
INTAKE MAN. TEMP., F	132	132	147	147	157	157
CONCENTRATIONS, DRY BASIS						
CO, %	1.2366	.0049	.5919	.0073	.0847	.0063
CO2, %	12.17	13.58	11.81	12.42	10.82	10.91
O2, %	2.73	1.80	4.23	3.49	6.28	6.50
HC, PPMC	1042	64	834	98	637	106
NOX, PPM	1927	1986	1836	1848	991	962
AIR/FUEL RATIO	16.14	16.17	17.79	17.62	20.33	20.67
EMISSION RATES, G/HR						
CO	1384.0	5.5	591.5	7.3	72.2	5.4
HC	58.6	3.6	41.9	4.9	27.3	4.6
NOX+	295.5	303.7	251.4	253.9	115.7	112.6
OIL TEMPERATURE, F	210	210	209	209	205	205
OIL PRESSURE, PSI	67	67	67	67	68	68
COOLANT TEMPERATURE, F	188	188	188	188	186	186
EXHAUST PRESSURE, IN. H2O	33.0	21.0	28.0	17.0	24.0	15.0
EXHAUST TEMPERATURE, F	1151	1100	1060	1000	980	840

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	34.01	34.02	35.01	35.02	36.01	36.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	32	32	32	32	32	32
TEMPERATURE, F	78	77	77	77	77	77
ENGINE SPEED, RPM	2500	2500	2500	2500	2500	2500
TORQUE, FT-LB	25.0	25.0	10.0	10.0	2.0	2.0
POWER, BHP*	11.6	11.6	4.6	4.6	.9	.9
FUEL RATE, LB/HR	8.3	8.3	6.5	6.5	5.6	5.7
IGNITION TIMING, DEG BTDC	49.0	49.0	49.0	49.0	48.0	48.0
MANIFOLD VACUUM, IN HG	14.2	14.4	17.5	17.5	19.0	19.0
THROTTLE ANGLE, DEG	11.6	11.6	7.1	7.1	5.5	5.5
INTAKE MAN. TEMP., F	166	167	178	178	183	183
CONCENTRATIONS, DRY BASIS						
CO, %	.1047	.0052	.5146	.0033	.5646	.0059
CO2, %	10.03	10.29	9.70	10.39	9.62	10.25
O2, %	6.37	6.01	6.36	5.84	6.38	5.96
HC, PPMC	1289	88	548	98	600	73
NOX, PPM	336	349	89	107	52	66
AIR/FUEL RATIO	20.66	20.54	20.48	20.31	20.47	20.49
EMISSION RATES, G/HR						
CO	76.0	3.8	294.0	1.9	280.7	3.0
HC	47.0	3.2	15.7	2.8	15.0	1.8
NOX+	33.4	34.6	6.9	8.3	3.6	4.5
OIL TEMPERATURE, F	199	199	195	195	193	193
OIL PRESSURE, PSI	69	69	70	70	70	70
COOLANT TEMPERATURE, F	184	186	184	184	183	183
EXHAUST PRESSURE, IN. H2O	10.0	9.0	9.0	5.0	9.0	5.0
EXHAUST TEMPERATURE, F	920	715	900	705	920	700

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	37.01	37.02	38.01	38.02	39.01	39.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/18/78	1/18/78	1/19/78	1/19/78	1/20/78	1/20/78
BAROMETER, MMHG	751.9	751.9	754.4	754.4	751.0	751.0
HUMIDITY, GRAINS/LB	35	35	34	34	28	28
TEMPERATURE, F	79	79	86	86	91	91
ENGINE SPEED, RPM	3000	3000	3000	3000	3000	3000
TORQUE, FT-LB	99.0	99.0	89.0	89.0	74.0	74.0
POWER, BHP*	55.3	55.3	49.5	49.5	41.3	41.3
FUEL RATE, LB/HR	33.2	33.3	24.3	24.5	21.4	21.3
IGNITION TIMING, DEG BTDC	33.0	33.0	39.0	39.0	43.0	43.0
MANIFOLD VACUUM, IN HG	.5	.5	3.5	3.5	5.2	5.2
THROTTLE ANGLE, DEG	71.5	71.5	44.6	44.6	34.2	34.2
INTAKE MAN. TEMP., F	110	110	117	117	134	134
CONCENTRATIONS, DRY BASIS						
CO, %	7.6500	7.4300	2.7476	2.8409	1.2253	.0123
CO2, %	9.91	10.02	12.44	12.70	13.26	14.72
O2, %	.41	.09	.44	.03	1.21	.35
HC, PPMC	1919	1355	1195	413	1178	52
NOX, PPM	1029	812	1858	1545	2353	1953
AIR/FUEL RATIO	11.78	11.71	13.82	13.60	15.03	15.10
EMISSION RATES, G/HR						
CO	12922.9	12692.6	3939.0	4039.1	1621.5	16.0
HC	162.8	116.3	86.0	29.5	78.3	3.4
NOX+	241.2	192.4	368.2	303.6	418.9	342.7
OIL TEMPERATURE, F	227	227	203	203	217	217
OIL PRESSURE, PSI	67	67	71	71	70	70
COOLANT TEMPERATURE, F	189	189	192	193	190	190
EXHAUST PRESSURE, IN. H2O	60.0	36.0	49.0	31.0	37.0	24.0
EXHAUST TEMPERATURE, F	1247	1160	1275	1119	1290	1270

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	40.01	40.02	41.01	41.02	42.01	42.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/26/78	1/26/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	750.0	750.0	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	29	29	34	34	34	34
TEMPERATURE, F	110	110	84	84	81	81
ENGINE SPEED, RPM	3000	3000	3000	3000	3000	3000
TORQUE, FT-LB	60.0	59.5	39.5	39.5	25.0	25.0
POWER, BHP*	33.5	33.2	22.0	22.0	13.9	13.9
FUEL RATE, LB/HR	16.7	16.7	12.3	12.3	10.6	10.5
IGNITION TIMING, DEG BTDC	45.0	45.0	52.0	52.0	52.0	52.0
MANIFOLD VACUUM, IN HG	8.0	8.0	12.5	12.5	14.5	14.5
THROTTLE ANGLE, DEG	17.2	17.2	17.6	17.6	14.6	14.6
INTAKE MAN. TEMP., F	153	153	155	155	159	159
CONCENTRATIONS, DRY BASIS						
CO, %	.7381	.0056	.2792	.0042	.2089	.0053
CO2, %	12.99	13.97	11.90	12.22	11.15	11.50
O2, %	1.82	1.05	3.24	3.27	4.46	4.22
HC, PPMC	800	61	610	74	624	62
NOX, PPM	1864	1907	1075	1056	483	512
AIR/FUEL RATIO	15.73	15.61	17.23	17.47	18.46	18.42
EMISSION RATES, G/HR						
CO	805.0	6.0	252.6	3.8	174.4	4.4
HC	43.8	3.3	27.7	3.4	26.2	2.6
NOX+	274.7	277.5	134.4	132.9	55.7	58.3
OIL TEMPERATURE, F	212	212	214	214	209	209
OIL PRESSURE, PSI	69	69	70	70	71	71
COOLANT TEMPERATURE, F	188	188	186	186	185	185
EXHAUST PRESSURE, IN. H2O	26.0	18.0	24.0	11.0	15.0	10.0
EXHAUST TEMPERATURE, F	1235	1120	1098	984	1057	886

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	43.01	43.02	44.01	44.02	45.01	45.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/23/78	1/23/78	1/18/78	1/18/78
BAROMETER, MMHG	754.4	754.4	746.1	746.1	751.9	751.9
HUMIDITY, GRAINS/LB	34	34	49	49	35	35
TEMPERATURE, F	80	80	80	80	76	76
ENGINE SPEED, RPM	3000	3000	3000	3000	3800	3800
TORQUE, FT-LB	10.0	10.0	.5	.5	96.0	96.0
POWER, BHP*	5.6	5.6	.3	.3	68.0	68.0
FUEL RATE, LB/HR	8.4	8.5	6.7	6.7	41.5	41.5
IGNITION TIMING, DEG BTDC	53.0	53.0	51.0	51.0	40.0	40.0
MANIFOLD VACUUM, IN HG	17.0	17.0	18.0	18.0	1.5	1.5
THROTTLE ANGLE, DEG	10.8	10.8	7.1	7.1	71.5	71.5
INTAKE MAN. TEMP., F	170	170	185	185	107	107
CONCENTRATIONS, DRY BASIS						
CO, %	.2148	.0064	.2124	.0055	7.4700	7.4300
CO2, %	10.53	10.73	9.64	10.05	9.90	9.93
O2, %	5.37	5.33	7.11	6.82	.16	.08
HC, PPMC	501	56	1854	117	1828	1374
NOX, PPM	118	169	106	118	783	491
AIR/FUEL RATIO	19.50	19.68	21.35	21.44	11.69	11.68
EMISSION RATES, G/HR						
CO	150.2	4.5	127.7	3.3	15945.3	15911.4
HC	17.6	2.0	56.0	3.5	195.9	147.7
NOX+	11.4	16.6	9.4	10.5	231.9	145.9
OIL TEMPERATURE, F	207	207	204	204	227	227
OIL PRESSURE, PSI	72	72	72	72	71	71
COOLANT TEMPERATURE, F	186	186	185	185	189	189
EXHAUST PRESSURE, IN. H2O	14.0	9.0	10.0	5.0	106.0	70.0
EXHAUST TEMPERATURE, F	1026	844	1030	935	1325	1193

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	46.01	46.02	47.01	47.02	48.01	48.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/26/78	1/26/78	1/24/78	1/24/78
BAROMETER, MMHG	754.4	754.4	750.0	750.0	740.5	740.5
HUMIDITY, GRAINS/LB	34	34	29	29	45	45
TEMPERATURE, F	86	86	112	112	106	106
ENGINE SPEED, RPM	3800	3800	3800	3800	3800	3800
TORQUE, FT-LB	86.5	86.5	72.0	72.0	57.5	57.5
POWER, BHP*	60.9	60.9	50.9	50.9	41.4	41.4
FUEL RATE, LB/HR	29.9	30.1	24.7	24.6	21.4	21.4
IGNITION TIMING, DEG BTDC	42.0	42.0	45.5	45.5	52.0	52.0
MANIFOLD VACUUM, IN HG	3.2	3.2	5.2	5.2	7.7	7.7
THROTTLE ANGLE, DEG	51.0	51.0	29.0	29.0	31.0	31.0
INTAKE MAN. TEMP., F	115	115	139	139	147	147
CONCENTRATIONS, DRY BASIS						
CO, %	1.9343	1.2558	.6042	.0065	.6547	.0065
CO2, %	13.00	14.07	13.85	14.63	13.64	14.46
O2, %	.61	.01	.82	.29	.97	.46
HC, PPMC	1125	55	977	51	1083	62
NOX, PPM	2713	829	2740	2561	2330	2223
AIR/FUEL RATIO	14.32	14.30	15.08	15.08	15.14	15.19
EMISSION RATES, G/HR						
CO	3465.2	2225.4	926.3	9.9	880.5	8.7
HC	101.2	4.9	75.2	3.9	73.1	4.2
NOX+	671.9	203.0	567.6	524.9	451.7	428.9
OIL TEMPERATURE, F	225	225	233	233	232	232
OIL PRESSURE, PSI	72	72	69	69	70	70
COOLANT TEMPERATURE, F	192	192	191	191	190	190
EXHAUST PRESSURE, IN. H2O	83.0	51.0	57.0	35.0	44.0	28.0
EXHAUST TEMPERATURE, F	1384	1300	1390	1240	1330	1320

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	49.01	49.02	50.01	50.02	51.01	51.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/24/78	1/24/78	1/24/78	1/24/78	1/24/78	1/24/78
BAROMETER, MMHG	740.5	740.5	740.5	740.5	740.5	740.5
HUMIDITY, GRAINS/LB	45	45	45	45	45	45
TEMPERATURE, F	100	100	93	93	89	89
ENGINE SPEED, RPM	3800	3800	3800	3800	3800	3800
TORQUE, FT-LB	38.5	38.5	24.0	24.0	9.5	9.5
POWER, BHP*	27.7	27.7	17.3	17.3	6.8	6.8
FUEL RATE, LB/HR	16.4	16.4	13.0	12.8	9.6	9.7
IGNITION TIMING, DEG BTDC	58.0	58.0	60.0	60.0	60.0	60.0
MANIFOLD VACUUM, IN HG	11.2	11.2	13.8	13.8	16.2	16.2
THROTTLE ANGLE, DEG	23.5	23.5	18.0	18.0	14.0	14.0
INTAKE MAN. TEMP., F	155	155	159	159	167	167
CONCENTRATIONS, DRY BASIS						
CO, %	.0457	.0037	.1918	.0052	.1871	.0050
CO2, %	13.03	13.22	12.35	12.56	11.72	11.90
O2, %	2.14	2.01	3.24	3.08	4.19	4.09
HC, PPMC	416	48	280	32	263	41
NOX, PPM	1758	1771	736	790	252	277
AIR/FUEL RATIO	16.41	16.36	17.24	17.24	18.13	18.19
EMISSION RATES, G/HR						
CO	51.5	4.1	178.6	4.8	135.5	3.7
HC	23.5	2.7	13.1	1.5	9.6	1.5
NOX+	285.4	286.1	98.8	105.1	26.3	29.5
OIL TEMPERATURE, F	230	230	223	223	220	220
OIL PRESSURE, PSI	72	72	73	73	73	73
COOLANT TEMPERATURE, F	188	188	188	188	187	187
EXHAUST PRESSURE, IN. H2O	30.0	18.0	21.0	13.0	16.0	9.0
EXHAUST TEMPERATURE, F	1250	1160	1200	1080	1150	1040

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	52.01	52.02	53.01	53.02	54.01	54.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/24/78	1/24/78	1/18/78	1/18/78	1/19/78	1/19/78
BAROMETER, MMHG	740.5	740.5	751.9	751.9	754.4	754.4
HUMIDITY, GRAINS/LB	45	45	35	35	34	34
TEMPERATURE, F	88	88	77	77	78	78
ENGINE SPEED, RPM	3800	3800	4200	4200	4200	4200
TORQUE, FT-LB	2.0	2.0	91.2	91.2	82.0	82.0
POWER, BHP*	1.4	1.4	71.4	71.4	63.8	63.8
FUEL RATE, LB/HR	8.9	8.8	44.4	44.8	32.9	32.7
IGNITION TIMING, DEG BTDC	58.0	58.0	43.0	43.0	46.0	46.0
MANIFOLD VACUUM, IN HG	17.5	17.5	1.5	1.5	3.2	3.2
THROTTLE ANGLE, DEG	12.4	12.4	71.5	71.5	53.3	53.3
INTAKE MAN. TEMP., F	170	170	108	108	116	116
CONCENTRATIONS, DRY BASIS						
CO, %	.1880	.0044	7.6300	7.3700	1.9727	.8340
CO2, %	11.44	11.65	10.17	10.18	12.90	14.37
O2, %	4.56	4.46	.16	.08	.83	.05
HC, PPMC	366	46	1754	1348	818	31
NOX, PPM	156	179	882	537	2637	853
AIR/FUEL RATIO	18.50	18.56	11.71	11.75	14.48	14.50
EMISSION RATES, G/HR						
CO	129.3	3.0	17031.6	16872.0	3920.4	1619.1
HC	12.6	1.6	196.6	155.0	81.7	3.1
NOX+	15.5	17.6	273.2	170.5	724.3	229.0
OIL TEMPERATURE, F	218	218	247	247	235	235
OIL PRESSURE, PSI	74	74	69	69	70	70
COOLANT TEMPERATURE, F	185	185	191	191	194	194
EXHAUST PRESSURE, IN. H2O	14.0	7.0	125.0	80.0	104.0	64.0
EXHAUST TEMPERATURE, F	1150	1010	1367	1230	1435	1386

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	55.01	55.02	56.01	56.02	57.01	57.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/20/78	1/20/78	1/19/78	1/19/78
BAROMETER, MMHG	754.4	754.4	751.0	751.0	754.4	754.4
HUMIDITY, GRAINS/LB	34	34	33	33	34	34
TEMPERATURE, F	108	108	103	103	101	101
ENGINE SPEED, RPM	4200	4200	4200	4200	4200	4200
TORQUE, FT-LB	68.0	68.0	54.5	54.5	36.5	36.5
POWER, BHP*	52.9	52.9	42.6	42.6	28.4	28.4
FUEL RATE, LB/HR	27.4	27.6	23.8	23.9	19.8	20.0
IGNITION TIMING, DEG BTDC	48.0	48.0	54.0	54.0	60.0	60.0
MANIFOLD VACUUM, IN HG	5.0	5.0	8.0	8.0	10.5	10.5
THROTTLE ANGLE, DEG	47.0	47.0	33.6	33.6	29.1	29.1
INTAKE MAN. TEMP., F	131	131	147	147	152	152
CONCENTRATIONS, DRY BASIS						
CO, %	.1994	.0593	.5507	.0014	.2401	.0082
CO2, %	13.20	13.18	13.92	14.69	13.71	14.13
O2, %	1.94	1.62	.95	.43	1.17	.91
HC, PPMC	250	24	1352	48	683	52
NOX, PPM	2752	2636	2664	2568	2466	2413
AIR/FUEL RATIO	16.20	16.08	15.15	15.18	15.53	15.52
EMISSION RATES, G/HR						
CO	368.3	111.5	810.5	2.1	306.1	10.5
HC	23.2	2.3	99.9	3.6	43.7	3.3
NOX+	702.3	685.0	539.1	517.7	434.6	425.2
OIL TEMPERATURE, F	241	241	240	240	238	238
OIL PRESSURE, PSI	69	69	69	69	70	70
COOLANT TEMPERATURE, F	191	191	190	190	188	188
EXHAUST PRESSURE, IN. H2O	82.0	52.0	50.0	31.0	41.0	25.0
EXHAUST TEMPERATURE, F	1418	1274	1351	1270	1315	1171

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	58.01	58.02	59.01	59.02	60.01	60.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/20/78	1/20/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	751.0	751.0
HUMIDITY, GRAINS/LB	34	34	34	34	33	33
TEMPERATURE, F	102	102	99	99	84	84
ENGINE SPEED, RPM	4200	4200	4200	4200	4200	4200
TORQUE, FT-LB	23.0	23.0	9.0	9.0	.7	.7
POWER, BHP*	17.9	17.9	7.0	7.0	.5	.5
FUEL RATE, LB/HR	14.6	14.7	11.1	11.2	10.9	10.9
IGNITION TIMING, DEG BTDC	62.0	62.0	62.0	62.0	60.0	60.0
MANIFOLD VACUUM, IN HG	15.0	15.0	17.0	17.0	18.5	18.5
THROTTLE ANGLE, DEG	19.7	19.7	15.3	15.3	14.1	14.1
INTAKE MAN. TEMP., F	161	161	168	168	168	168
CONCENTRATIONS, DRY BASIS						
CO, %	.2426	.0059	.1762	.0064	.1448	.0004
CO2, %	13.66	13.91	13.24	13.43	12.95	13.04
O2, %	1.34	1.21	1.95	1.92	2.77	2.75
HC, PPMC	155	29	41	13	51	24
NOX, PPM	1019	1216	296	297	187	203
AIR/FUEL RATIO	15.66	15.70	16.16	16.22	16.82	16.89
EMISSION RATES, G/HR						
CO	230.0	5.7	131.7	4.8	108.6	.3
HC	7.4	1.4	1.5	.5	1.9	.9
NOX+	133.5	160.7	30.6	31.0	19.3	21.1
OIL TEMPERATURE, F	232	232	230	230	225	225
OIL PRESSURE, PSI	72	72	72	72	73	73
COOLANT TEMPERATURE, F	187	187	187	187	186	186
EXHAUST PRESSURE, IN. H2O	25.0	15.0	17.0	10.0	12.0	9.0
EXHAUST TEMPERATURE, F	1274	1070	1243	1012	1224	1000

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	61.01	61.02	62.01	62.02	63.01	63.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/26/78	1/26/78	1/19/78	1/19/78	1/19/78	1/19/78
BAROMETER, MMHG	750.0	750.0	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	29	29	37	37	37	37
TEMPERATURE, F	82	82	78	78	84	84
ENGINE SPEED, RPM	5000	5000	5000	5000	5000	5000
TORQUE, FT-LB	80.0	80.0	71.0	71.0	59.0	59.0
POWER, BHP*	74.4	74.4	65.9	65.9	54.8	54.8
FUEL RATE, LB/HR	46.2	45.8	38.9	38.9	31.7	31.3
IGNITION TIMING, DEG BTDC	43.0	43.0	45.0	45.0	52.0	52.0
MANIFOLD VACUUM, IN HG	2.0	2.0	3.2	3.2	6.0	6.0
THROTTLE ANGLE, DEG	45.0	45.0	55.6	55.6	44.2	44.2
INTAKE MAN. TEMP., F	110	110	107	107	138	138
CONCENTRATIONS, DRY BASIS						
CO, %	5.3190	5.1420	2.1929	1.6065	.5923	.0115
CO2, %	11.33	11.52	12.84	14.10	13.77	14.51
O2, %	.12	.06	.71	.04	.83	.46
HC, PPMC	1799	1249	705	37	537	30
NOX, PPM	1583	1357	2195	899	2388	2281
AIR/FUEL RATIO	12.55	12.63	14.30	14.18	15.13	15.19
EMISSION RATES, G/HR						
CO	13195.1	12662.3	5102.1	3591.8	1177.4	22.3
HC	224.2	154.5	82.4	4.2	53.6	2.9
NOX+	530.6	451.5	712.6	280.4	662.3	618.9
OIL TEMPERATURE, F	270	270	218	218	249	249
OIL PRESSURE, PSI	63	63	75	75	67	67
COOLANT TEMPERATURE, F	190	190	195	195	191	191
EXHAUST PRESSURE, IN. H2O	147.0	90.0	140.0	89.0	94.0	56.0
EXHAUST TEMPERATURE, F	1473	1407	1513	1422	1465	1341

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	64.01	64.02	65.01	65.02	66.01	66.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/19/78	1/19/78	1/19/78	1/19/78	1/24/78	1/24/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	743.5	743.5
HUMIDITY, GRAINS/LB	37	37	37	37	40	40
TEMPERATURE, F	89	89	99	99	98	98
ENGINE SPEED, RPM	5000	5000	5000	5000	5000	5000
TORQUE, FT-LB	47.5	47.5	31.5	31.5	20.0	20.0
POWER, BHP*	44.1	44.1	29.2	29.2	18.9	18.9
FUEL RATE, LB/HR	26.7	27.0	21.3	21.4	18.2	17.9
IGNITION TIMING, DEG BTDC	56.0	56.0	60.0	60.0	60.0	60.0
MANIFOLD VACUUM, IN HG	8.5	8.5	12.0	12.0	13.8	13.8
THROTTLE ANGLE, DEG	36.8	36.8	28.8	28.8	19.5	19.5
INTAKE MAN. TEMP., F	150	150	151	151	154	154
CONCENTRATIONS, DRY BASIS						
CO, %	.3854	.0080	.1862	.0081	.1429	.0063
CO2, %	13.89	14.33	13.80	14.62	13.51	13.62
O2, %	.84	.38	1.16	.62	1.56	1.47
HC, PPMC	597	37	227	152	74	16
NOX, PPM	2249	2204	1780	1347	1354	1425
AIR/FUEL RATIO	15.22	15.14	15.58	15.25	15.90	15.92
EMISSION RATES, G/HR						
CO	649.7	13.7	255.3	10.7	171.6	7.5
HC	50.6	3.2	15.7	10.1	4.5	1.0
NOX+	529.0	523.6	340.5	248.5	230.1	239.7
OIL TEMPERATURE, F	254	254	248	248	154	154
OIL PRESSURE, PSI	65	65	64	64	69	69
COOLANT TEMPERATURE, F	191	191	187	187	190	190
EXHAUST PRESSURE, IN. H2O	74.0	44.0	49.0	30.0	33.0	20.0
EXHAUST TEMPERATURE, F	1432	1281	1380	1181	1345	1205

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	67.01	67.02	68.01	68.02	69.01	69.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/24/78	1/24/78	1/24/78	1/24/78	1/20/78	1/20/78
BAROMETER, MMHG	743.5	743.5	743.5	743.5	754.4	754.4
HUMIDITY, GRAINS/LB	40	40	40	40	44	44
TEMPERATURE, F	92	92	88	88	79	79
ENGINE SPEED, RPM	5000	5000	5000	5000	900	900
TORQUE, FT-LB	10.0	10.0	1.6	1.6	.0	.0
POWER, BHP*	9.4	9.4	1.5	1.5	.0	.0
FUEL RATE, LB/HR	15.1	15.1	13.0	13.0	1.9	1.9
IGNITION TIMING, DEG BTDC	60.0	60.0	62.0	62.0	12.0	12.0
MANIFOLD VACUUM, IN HG	16.0	16.0	17.5	17.5	20.5	20.5
THROTTLE ANGLE, DEG	16.0	16.0	13.7	13.7	.0	.0
INTAKE MAN. TEMP., F	158	158	163	163	158	158
CONCENTRATIONS, DRY BASIS						
CO, %	.1051	.0041	.1009	.0035	.8143	.0022
CO2, %	13.19	13.43	12.97	13.11	9.39	10.29
O2, %	2.05	1.81	2.50	2.40	6.87	6.33
HC, PPMC	102	22	193	14	989	88
NOX, PPM	625	635	301	316	26	32
AIR/FUEL RATIO	16.28	16.15	16.63	16.62	20.68	20.83
EMISSION RATES, G/HR						
CO	107.5	4.2	90.7	3.1	133.5	.4
HC	5.2	1.1	8.7	.6	8.1	.7
NOX+	90.4	91.0	38.3	40.1	.6	.8
OIL TEMPERATURE, F	249	249	235	235	172	172
OIL PRESSURE, PSI	69	69	71	71	43	43
COOLANT TEMPERATURE, F	189	189	190	190	180	180
EXHAUST PRESSURE, IN. H2O	25.0	15.0	18.0	11.0	2.0	.0
EXHAUST TEMPERATURE, F	1310	1170	1290	1110	714	697

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	70.01	70.02	71.01	71.02	72.01	72.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	754.4	754.4
HUMIDITY, GRAINS/LB	44	44	44	44	44	44
TEMPERATURE, F	80	80	80	80	81	81
ENGINE SPEED, RPM	900	900	900	900	800	800
TORQUE, FT-LB	10.0	10.0	15.0	15.0	7.1	7.1
POWER, BHP*	1.7	1.7	2.5	2.5	1.1	1.1
FUEL RATE, LB/HR	2.6	2.6	3.5	3.5	2.0	2.1
IGNITION TIMING, DEG BTDC	12.0	12.0	12.0	12.0	12.0	12.0
MANIFOLD VACUUM, IN HG	19.0	19.0	15.2	15.2	19.0	19.0
THROTTLE ANGLE, DEG	1.0	1.0	2.7	2.7	.0	.0
INTAKE MAN. TEMP., F	154	154	151	151	158	158
CONCENTRATIONS, DRY BASIS						
CO, %	1.3841	.0000	1.6606	.0003	1.2141	.0005
CO2, %	10.05	11.58	10.65	12.63	9.80	11.16
O2, %	5.36	4.42	4.24	2.99	5.79	4.94
HC, PPMC	982	99	1336	105	1170	89
NOX, PPM	36	48	34	47	29	40
AIR/FUEL RATIO	18.44	18.54	17.10	17.13	19.03	19.14
EMISSION RATES, G/HR						
CO	280.4	.0	421.5	.1	200.0	.1
HC	10.0	1.0	17.0	1.3	9.7	.8
NOX+	1.1	1.4	1.2	1.7	.7	1.0
OIL TEMPERATURE, F	173	173	173	173	174	174
OIL PRESSURE, PSI	41	41	42	42	36	36
COOLANT TEMPERATURE, F	183	183	182	182	183	183
EXHAUST PRESSURE, IN. H2O	2.0	1.0	3.0	1.0	2.0	1.0
EXHAUST TEMPERATURE, F	752	620	781	664	700	700

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	73.01	73.02	76.01	76.02	78.01	78.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	754.4	754.4	754.4	754.4	753.2	753.2
HUMIDITY, GRAINS/LB	44	44	44	44	33	33
TEMPERATURE, F	92	92	81	81	94	94
ENGINE SPEED, RPM	1000	1000	1000	1000	1500	1500
TORQUE, FT-LB	66.0	66.0	9.0	9.0	69.0	69.0
POWER, BHP*	12.3	12.3	1.7	1.7	19.2	19.2
FUEL RATE, LB/HR	6.6	6.6	3.6	3.7	9.5	9.5
IGNITION TIMING, DEG BTDC	19.0	19.0	17.0	17.0	30.0	30.0
MANIFOLD VACUUM, IN HG	5.5	5.5	15.0	15.0	5.5	5.5
THROTTLE ANGLE, DEG	13.5	13.5	2.8	2.6	18.5	18.5
INTAKE MAN. TEMP., F	146	146	166	166	144	144
CONCENTRATIONS, DRY BASIS						
CO, %	2.5916	.0000	1.2452	.0002	1.0050	.0005
CO2, %	10.98	14.18	10.75	12.08	11.56	12.58
O2, %	2.99	.89	4.49	3.66	3.09	2.48
HC, PPMC	2771	93	1220	113	1840	86
NOX, PPM	216	236	33	44	866	994
AIR/FUEL RATIO	15.37	15.43	17.61	17.77	16.48	16.77
EMISSION RATES, G/HR						
CO	1114.1	.0	334.2	.1	677.5	.3
HC	59.8	2.0	16.4	1.6	62.3	3.0
NOX+	13.3	14.3	1.3	1.7	80.2	93.3
OIL TEMPERATURE, F	177	177	178	178	192	192
OIL PRESSURE, PSI	46	46	45	45	65	65
COOLANT TEMPERATURE, F	186	186	184	184	188	188
EXHAUST PRESSURE, IN. H2O	6.0	4.0	5.0	2.0	12.0	10.0
EXHAUST TEMPERATURE, F	800	800	832	855	1001	910

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	79.01	79.02	80.01	80.02	82.01	82.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	753.2	753.2	753.2	753.2	753.2	753.2
HUMIDITY, GRAINS/LB	33	33	45	33	33	33
TEMPERATURE, F	81	81	80	80	77	77
ENGINE SPEED, RPM	1500	1500	1500	1500	1500	1500
TORQUE, FT-LB	55.0	55.0	23.0	23.0	1.0	1.0
POWER, BHP*	15.3	15.3	6.4	6.4	.3	.3
FUEL RATE, LB/HR	7.9	8.0	5.5	5.5	3.7	3.6
IGNITION TIMING, DEG BTDC	33.0	33.0	37.0	37.0	34.0	34.0
MANIFOLD VACUUM, IN HG	7.0	7.0	13.6	13.6	19.0	19.0
THROTTLE ANGLE, DEG	14.7	14.7	6.5	6.5	3.0	3.0
INTAKE MAN. TEMP., F	153	153	180	180	165	165
CONCENTRATIONS, DRY BASIS						
CO, %	.0929	.0005	1.8796	.0005	.4553	.0005
CO2, %	11.39	11.74	9.93	11.81	9.34	9.89
O2, %	4.06	3.77	4.79	3.58	6.70	6.56
HC, PPMC	1626	85	1777	94	739	71
NOX, PPM	700	676	59	72	34	42
AIR/FUEL RATIO	18.00	17.98	17.46	17.78	21.06	21.30
EMISSION RATES, G/HR						
CO	57.0	.3	774.5	.2	154.3	.2
HC	50.1	2.6	36.8	2.0	12.6	1.2
NOX+	59.0	56.9	3.5	4.2	1.6	1.9
OIL TEMPERATURE, F	188	188	185	185	180	180
OIL PRESSURE, PSI	59	59	61	61	62	62
COOLANT TEMPERATURE, F	186	186	183	183	183	183
EXHAUST PRESSURE, IN. H2O	11.0	7.0	9.0	4.0	8.0	3.0
EXHAUST TEMPERATURE, F	950	850	850	900	850	790

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	83.01	83.02	84.01	84.02	85.01	85.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/23/78	1/23/78
BAROMETER, MMHG	753.2	753.2	753.2	753.2	746.1	746.1
HUMIDITY, GRAINS/LB	33	33	33	33	49	49
TEMPERATURE, F	81	81	82	82	81	81
ENGINE SPEED, RPM	2000	2000	2000	2000	2000	2000
TORQUE, FT-LB	74.0	74.0	59.5	59.5	25.0	25.0
POWER, BHP*	27.5	27.5	22.1	22.1	9.4	9.4
FUEL RATE, LB/HR	13.0	13.2	10.7	10.7	6.7	6.7
IGNITION TIMING, DEG BTDC	40.0	40.0	45.0	45.0	45.0	45.0
MANIFOLD VACUUM, IN HG	5.3	5.3	7.5	7.5	13.0	13.0
THROTTLE ANGLE, DEG	25.0	25.0	19.4	19.4	10.1	10.1
INTAKE MAN. TEMP., F	133	133	149	149	177	177
CONCENTRATIONS, DRY BASIS						
CO, %	.5687	.0005	.1033	.0000	.0967	.0027
CO2, %	11.46	12.40	11.19	11.48	9.82	10.25
O2, %	3.39	2.85	4.18	3.93	7.05	6.62
HC, PPMC	1479	90	1555	88	2192	155
NOX, PPM	2469	2374	2033	2027	147	175
AIR/FUEL RATIO	17.15	17.15	18.22	18.25	21.26	21.12
EMISSION RATES, G/HR						
CO	548.6	.5	87.3	.0	57.5	1.6
HC	71.7	4.4	66.0	3.7	65.5	4.6
NOX+	327.3	314.3	236.0	234.5	12.8	15.2
OIL TEMPERATURE, F	196	196	200	200	190	190
OIL PRESSURE, PSI	65	65	65	65	66	66
COOLANT TEMPERATURE, F	188	188	188	188	186	186
EXHAUST PRESSURE, IN. H2O	18.0	15.0	17.0	11.0	6.0	5.0
EXHAUST TEMPERATURE, F	1080	1010	1020	980	924	853

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	86.01	86.02	88.01	88.02	90.01	90.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	752.0	752.0	751.0	751.0	751.0	751.0
HUMIDITY, GRAINS/LB	31	31	31	31	31	31
TEMPERATURE, F	78	78	83	83	80	80
ENGINE SPEED, RPM	2000	2000	2500	2500	2500	2500
TORQUE, FT-LB	10.0	10.0	76.0	76.0	25.0	25.0
POWER, BHP*	3.7	3.7	35.3	35.3	11.6	11.6
FUEL RATE, LB/HR	5.6	5.6	16.6	16.6	8.3	8.5
IGNITION TIMING, DEG BTDC	45.0	45.0	42.0	42.0	48.0	48.0
MANIFOLD VACUUM, IN HG	16.5	16.5	5.0	5.0	13.5	13.5
THROTTLE ANGLE, DEG	6.2	6.2	30.7	30.7	13.1	13.1
INTAKE MAN. TEMP., F	187	187	131	131	168	168
CONCENTRATIONS, DRY BASIS						
CO, %	.5869	.0010	.9149	.0034	.1074	.0015
CO2, %	10.18	10.86	12.66	13.87	10.39	10.79
O2, %	6.13	5.67	2.28	1.54	6.36	5.84
HC, PPMC	1178	101	1005	81	1254	87
NOX, PPM	59	74	2288	2365	334	358
AIR/FUEL RATIO	19.82	19.92	15.98	15.97	20.46	20.12
EMISSION RATES, G/HR						
CO	271.5	.5	1001.5	3.7	75.7	1.0
HC	27.4	2.3	55.2	4.4	44.4	3.1
NOX+	3.7	4.7	341.2	347.5	32.1	34.6
OIL TEMPERATURE, F	191	191	199	199	169	169
OIL PRESSURE, PSI	67	67	69	69	69	69
COOLANT TEMPERATURE, F	185	185	192	192	184	184
EXHAUST PRESSURE, IN. H2O	7.0	4.0	28.0	18.0	15.0	9.0
EXHAUST TEMPERATURE, F	930	810	1185	1120	1000	880

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	92.01	92.02	94.01	94.02	95.01	95.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	751.0	751.0	751.0	751.0	751.0	751.0
HUMIDITY, GRAINS/LB	31	31	31	31	31	31
TEMPERATURE, F	79	79	92	92	83	83
ENGINE SPEED, RPM	2500	2500	3000	3000	3000	3000
TORQUE, FT-LB	1.5	1.5	59.5	59.5	25.0	25.0
POWER, BHP*	.7	.7	33.2	33.2	14.0	14.0
FUEL RATE, LB/HR	5.7	5.7	18.3	18.5	11.0	11.0
IGNITION TIMING, DEG BTDC	48.0	48.0	47.0	47.0	51.0	51.0
MANIFOLD VACUUM, IN HG	18.5	18.5	7.6	7.6	13.9	13.9
THROTTLE ANGLE, DEG	6.8	6.8	26.7	26.7	15.4	15.4
INTAKE MAN. TEMP., F	186	186	146	146	164	164
CONCENTRATIONS, DRY BASIS						
CO, %	.3440	.0016	1.1487	.0035	.1770	.0018
CO2, %	9.93	10.32	12.91	14.29	11.46	11.67
O2, %	6.93	6.55	1.74	.93	4.82	4.63
HC, PPMC	1298	90	1016	52	657	50
NOX, PPM	61	77	1856	1943	610	565
AIR/FUEL RATIO	20.95	21.02	15.44	15.51	18.70	18.72
EMISSION RATES, G/HR						
CO	169.8	.8	1340.6	4.1	150.2	1.5
HC	32.2	2.2	59.5	3.0	28.0	2.1
NOX+	4.1	5.2	295.2	308.9	70.6	65.5
OIL TEMPERATURE, F	197	197	224	224	214	214
OIL PRESSURE, PSI	70	70	69	69	71	71
COOLANT TEMPERATURE, F	183	183	189	189	186	186
EXHAUST PRESSURE, IN. H2O	11.0	5.0	34.0	20.0	19.0	5.0
EXHAUST TEMPERATURE, F	970	800	1260	1215	1110	940

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	96.01	96.02	97.01	97.02	99.01	99.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/23/78	1/23/78
BAROMETER, MMHG	751.0	751.0	751.0	751.0	746.1	746.1
HUMIDITY, GRAINS/LB	31	31	31	31	49	49
TEMPERATURE, F	80	80	80	80	103	103
ENGINE SPEED, RPM	3000	3000	3000	3000	3800	3800
TORQUE, FT-LB	10.0	10.0	1.0	1.0	57.5	57.5
POWER, BHP*	5.6	5.6	.6	.6	41.0	41.0
FUEL RATE, LB/HR	8.5	8.3	6.8	6.8	21.3	21.3
IGNITION TIMING, DEG BTDC	51.0	51.0	52.0	52.0	52.0	52.0
MANIFOLD VACUUM, IN HG	16.5	16.5	18.4	18.4	7.5	7.5
THROTTLE ANGLE, DEG	11.8	11.8	9.5	9.5	25.1	25.1
INTAKE MAN. TEMP., F	172	172	175	175	150	150
CONCENTRATIONS, DRY BASIS						
CO, %	.1786	.0009	.2103	.0006	.4358	.0029
CO2, %	10.60	11.01	9.98	10.49	13.81	14.46
O2, %	5.92	5.86	6.84	6.44	1.25	.77
HC, PPMC	644	65	964	76	885	78
NOX, PPM	176	207	87	100	2517	2551
AIR/FUEL RATIO	19.98	20.03	21.06	20.82	15.46	15.41
EMISSION RATES, G/HR						
CO	125.8	.6	125.9	.4	583.8	3.9
HC	22.8	2.2	29.0	2.2	59.6	5.2
NOX+	16.9	19.3	7.1	8.0	495.1	498.4
OIL TEMPERATURE, F	209	209	201	201	232	232
OIL PRESSURE, PSI	72	72	73	73	70	70
COOLANT TEMPERATURE, F	185	185	184	184	190	190
EXHAUST PRESSURE, IN. H2O	15.0	7.0	11.0	5.0	44.0	28.0
EXHAUST TEMPERATURE, F	1035	850	1010	815	1336	1255

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	100.01	100.02	101.01	101.02	103.01	103.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/23/78	1/23/78	1/20/78	1/20/78
BAROMETER, MMHG	751.0	751.0	746.1	746.1	751.0	751.0
HUMIDITY, GRAINS/LB	33	33	49	49	33	33
TEMPERATURE, F	90	90	80	80	105	105
ENGINE SPEED, RPM	3800	3800	3800	3800	4200	4200
TORQUE, FT-LB	24.0	24.0	9.5	9.5	68.0	68.0
POWER, BHP*	17.0	17.0	6.8	6.8	53.2	53.2
FUEL RATE, LB/HR	14.1	14.1	9.9	9.8	29.2	28.7
IGNITION TIMING, DEG BTDC	60.0	60.0	58.0	58.0	48.0	48.0
MANIFOLD VACUUM, IN HG	14.5	14.5	17.0	17.0	5.0	5.0
THROTTLE ANGLE, DEG	19.1	19.1	11.6	11.6	46.0	46.0
INTAKE MAN. TEMP., F	159	159	155	155	137	137
CONCENTRATIONS, DRY BASIS						
CO, %	.2221	.0026	.1846	.0058	.3779	.0017
CO2, %	12.91	13.23	11.81	11.96	13.50	14.34
O2, %	2.59	2.41	4.27	4.17	1.77	1.21
HC, PPMC	323	60	525	33	324	34
NOX, PPM	854	865	261	293	2878	2888
AIR/FUEL RATIO	16.63	16.63	18.13	18.24	15.95	15.74
EMISSION RATES, G/HR						
CO	215.0	2.5	137.0	4.3	716.8	3.2
HC	15.7	2.9	19.6	1.2	30.9	3.1
NOX+	113.6	114.0	28.4	31.9	750.7	718.0
OIL TEMPERATURE, F	228	228	199	199	238	238
OIL PRESSURE, PSI	72	72	78	78	69	69
COOLANT TEMPERATURE, F	186	186	180	180	191	191
EXHAUST PRESSURE, IN. H2O	21.0	11.0	16.0	9.0	80.0	50.0
EXHAUST TEMPERATURE, F	1227	1094	1157	950	1416	1309

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	105.01	105.02	106.01	106.02	109.01	109.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	751.0	751.0	751.0	751.0	751.0	751.0
HUMIDITY, GRAINS/LB	33	33	33	33	33	33
TEMPERATURE, F	89	89	87	87	97	97
ENGINE SPEED, RPM	4200	4200	4200	4200	5000	5000
TORQUE, FT-LB	23.0	23.0	9.0	9.0	47.0	47.5
POWER, BHP*	18.0	18.0	7.0	7.0	43.8	44.2
FUEL RATE, LB/HR	15.4	15.5	12.0	12.0	26.7	27.0
IGNITION TIMING, DEG BTDC	59.0	59.0	60.0	60.0	56.0	56.0
MANIFOLD VACUUM, IN HG	14.5	14.5	17.0	17.0	8.0	8.0
THROTTLE ANGLE, DEG	21.2	21.2	16.7	16.7	28.1	28.1
INTAKE MAN. TEMP., F	156	156	163	163	144	144
CONCENTRATIONS, DRY BASIS						
CO, %	.2312	.0021	.1807	.0030	.3324	.0034
CO2, %	13.64	13.95	13.32	13.40	13.91	14.39
O2, %	1.67	1.52	2.31	2.27	1.19	.94
HC, PPMC	290	38	160	17	442	30
NOX, PPM	1186	1170	409	404	2837	2857
AIR/FUEL RATIO	15.90	15.92	16.40	16.48	15.53	15.55
EMISSION RATES, G/HR						
CO	230.7	2.1	144.4	2.4	561.5	5.8
HC	14.5	1.9	6.4	.7	37.5	2.6
NOX+	162.7	161.0	45.0	44.8	659.0	664.3
OIL TEMPERATURE, F	230	230	229	229	254	254
OIL PRESSURE, PSI	72	72	72	72	67	67
COOLANT TEMPERATURE, F	186	186	186	186	190	190
EXHAUST PRESSURE, IN. H2O	21.0	15.0	15.0	10.0	76.0	46.0
EXHAUST TEMPERATURE, F	1271	1091	1244	1058	1444	1313

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	110.01	110.02	111.01	111.02	112.01	112.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78	1/20/78
BAROMETER, MMHG	751.0	751.0	751.0	751.0	751.0	751.0
HUMIDITY, GRAINS/LB	33	33	33	33	33	33
TEMPERATURE, F	92	92	91	91	88	88
ENGINE SPEED, RPM	5000	5000	5000	5000	5000	5000
TORQUE, FT-LB	20.0	20.0	8.0	8.0	2.7	2.7
POWER, BHP*	18.6	18.6	7.5	7.5	2.5	2.5
FUEL RATE, LB/HR	17.8	17.7	13.9	14.1	12.8	12.8
IGNITION TIMING, DEG BTDC	63.0	63.0	62.0	62.0	62.0	62.0
MANIFOLD VACUUM, IN HG	15.0	15.0	17.0	17.0	18.0	18.0
THROTTLE ANGLE, DEG	19.4	19.4	16.9	16.9	13.9	13.9
INTAKE MAN. TEMP., F	144	144	150	150	157	157
CONCENTRATIONS, DRY BASIS						
CO, %	.1359	.0019	.0986	.0020	.0906	.0014
CO2, %	13.43	13.58	13.21	13.33	13.11	13.27
O2, %	2.03	1.91	2.36	2.28	2.50	2.37
HC, PPMC	88	16	187	35	102	19
NOX, PPM	1188	1251	463	483	310	312
AIR/FUEL RATIO	16.25	16.24	16.50	16.50	16.62	16.57
EMISSION RATES, G/HR						
CO	160.6	2.2	93.1	1.9	79.3	1.2
HC	5.2	.9	8.9	1.7	4.5	.9
NOX+	193.0	201.9	60.1	63.4	37.3	37.4
OIL TEMPERATURE, F	220	220	245	245	242	242
OIL PRESSURE, PSI	73	73	70	70	70	70
COOLANT TEMPERATURE, F	190	190	190	190	189	189
EXHAUST PRESSURE, IN. H2O	30.0	20.0	21.0	14.0	18.0	11.0
EXHAUST TEMPERATURE, F	1341	1120	1316	1115	1305	1090

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	113.01	113.02	114.01	114.02	115.01	115.02
DATA SOURCE CODE	1	2	1	2	1	2
TEST DATE	1/23/78	1/23/78	1/23/78	1/23/78	1/23/78	1/23/78
BAROMETER, MMHG	746.1	746.1	746.1	746.1	746.1	746.1
HUMIDITY, GRAINS/LB	49	49	49	49	49	49
TEMPERATURE, F	84	84	90	90	88	88
ENGINE SPEED, RPM	2000	2000	2000	2000	3800	3800
TORQUE, FT-LB	59.5	59.3	74.0	74.0	24.0	24.0
POWER, BHP*	22.4	22.3	27.8	27.8	17.1	17.1
FUEL RATE, LB/HR	10.5	10.5	12.5	12.6	13.1	13.2
IGNITION TIMING, DEG BTDC	46.0	46.0	41.0	41.0	58.0	58.0
MANIFOLD VACUUM, IN HG	7.0	7.0	5.5	5.5	14.5	14.5
THROTTLE ANGLE, DEG	19.6	19.6	20.6	20.6	14.4	14.4
INTAKE MAN. TEMP., F	156	156	143	143	166	166
CONCENTRATIONS, DRY BASIS						
CO, %	.0613	.0041	.1901	.0039	.1922	.0045
CO2, %	11.35	11.54	12.04	12.55	12.49	12.84
O2, %	4.79	4.59	3.70	3.13	3.27	2.96
HC, PPMC	1365	111	1231	98	331	42
NOX, PPM	1830	1720	2633	2538	791	812
AIR/FUEL RATIO	18.75	18.77	17.61	17.34	17.23	17.10
EMISSION RATES, G/HR						
CO	50.5	3.4	173.9	3.5	178.3	4.2
HC	56.4	4.6	56.6	4.5	15.4	1.9
NOX+	221.2	207.8	353.8	336.8	107.8	110.4
OIL TEMPERATURE, F	196	196	203	203	221	221
OIL PRESSURE, PSI	65	65	64	64	72	72
COOLANT TEMPERATURE, F	189	189	190	190	189	189
EXHAUST PRESSURE, IN. H2O	15.0	10.0	18.0	14.0	20.0	10.0
EXHAUST TEMPERATURE, F	1003	908	1080	1009	1231	1088

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	116.01	116.02	117.01	117.02	118.01	119.01
DATA SOURCE CODE	1	2	1	2	1	1
TEST DATE	1/24/78	1/24/78	1/24/78	1/24/78	1/27/78	1/27/78
BAROMETER, MMHG	740.9	740.5	743.5	743.5	756.0	756.0
HUMIDITY, GRAINS/LB	45	45	40	40	24	24
TEMPERATURE, F	104	104	81	81	76	74
ENGINE SPEED, RPM	3800	3800	5250	5250	1000	1500
TORQUE, FT-LB	72.0	72.0	74.5	74.5	-11.0	-21.5
POWER, BHP*	51.8	51.9	73.8	73.8	2.0	5.9
FUEL RATE, LB/HR	25.1	24.6	48.6	48.6	1.3	1.4
IGNITION TIMING, DEG BTDC	45.0	45.0	44.0	44.0	.0	.0
MANIFOLD VACUUM, IN HG	5.0	5.0	2.0	2.0	20.6	22.6
THROTTLE ANGLE, DEG	39.0	39.0	71.0	71.0	.0	.0
INTAKE MAN. TEMP., F	137	137	107	107	152	147
CONCENTRATIONS, DRY BASIS						
CO, %	.8386	.0428	6.8880	6.5882	.1581	.0631
CO2, %	13.68	14.68	10.42	10.65	4.42	.80
O2, %	.66	.12	.11	.05	14.79	19.60
HC, PPMC	1249	48	2121	1490	10707	10323
NOX, PPM	2610	1776	942	500	9	8
AIR/FUEL RATIO	14.84	14.93	11.90	12.02	37.51	107.97
EMISSION RATES, G/HR						
CO	1297.7	64.5	17272.3	16646.9	34.0	43.5
HC	97.1	3.7	267.1	189.0	115.5	357.3
NOX+	582.2	386.0	334.3	178.8	.3	.7
OIL TEMPERATURE, F	232	232	260	260	183	166
OIL PRESSURE, PSI	70	70	65	65	44	66
COOLANT TEMPERATURE, F	189	189	192	192	177	172
EXHAUST PRESSURE, IN. H2O	59.0	35.0	149.0	92.0	1.0	1.0
EXHAUST TEMPERATURE, F	1370	1360	1436	1360	620	360

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

ENGINE: AMC 121-CID
FUEL CODE: 7718

TEST NUMBER	120.01	121.01	122.01	123.01	124.01	125.01
DATA SOURCE CODE	1	1	1	1	1	1
TEST DATE	1/27/78	1/27/78	1/27/78	1/27/78	1/27/78	1/27/78
BAROMETER, MMHG	756.0	756.0	756.0	756.0	756.0	756.0
HUMIDITY, GRAINS/LB	24	24	24	24	24	24
TEMPERATURE, F	75	74	74	75	72	72
ENGINE SPEED, RPM	2000	1000	1500	2000	1000	1500
TORQUE, FT-LB	-26.0	-20.5	-24.0	-27.4	-16.4	-20.0
POWER, BHP*	9.6	3.8	6.6	10.1	3.0	5.5
FUEL RATE, LB/HR	1.7			1.5		
IGNITION TIMING, DEG BTDC						
MANIFOLD VACUUM, IN HG	23.6	22.0	23.5	24.4	.4	.5
THROTTLE ANGLE, DEG						
INTAKE MAN. TEMP., F	140	146	145	144	144	143
CONCENTRATIONS, DRY BASIS						
CO, %	.0243					
CO2, %	.24					
O2, %	20.46					
HC, PPMC	10262					
NOX, PPM	8					
AIR/FUEL RATIO	158.44		20211.32			
EMISSION RATES, G/HR						
CO	28.6					
HC	607.6					
NOX+	1.3					
OIL TEMPERATURE, F	165	156	157	145	137	136
OIL PRESSURE, PSI	70	54	68	72	65	70
COOLANT TEMPERATURE, F	169	167	163	162	151	148
EXHAUST PRESSURE, IN. H2O	1.0	1.0	1.0	1.0	1.0	1.0
EXHAUST TEMPERATURE, F	303	280	231	280	109	99

* CORRECTED SAE J816B
+ CORRECTED FOR HUMIDITY

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ENGINE:  AMC 121-CID
FUEL CODE:  7718
TEST NUMBER                          126.01
DATA SOURCE CODE                          1
TEST DATE                           1/27/78
BAROMETER, MMHG                       756.0
HUMIDITY, GRAINS/LB                      24
TEMPERATURE, F                           73
ENGINE SPEED, RPM                      2000
TORQUE, FT-LB                         -23.0
POWER, BHP*                             8.5
FUEL RATE, LB/HR
IGNITION TIMING, DEG BTDC
MANIFOLD VACUUM, IN HG                   .6
THROTTLE ANGLE, DEG
INTAKE MAN. TEMP., F                    142
  CONCENTRATIONS, DRY BASIS
       CO, %
       CO2, %
       O2, %
       HC, PPMC
       NOX, PPM

AIR/FUEL RATIO

  EMISSION RATES, G/HR
       CO
       HC
       NOX+

OIL TEMPERATURE, F                      143
OIL PRESSURE, PSI                        74
COOLANT TEMPERATURE, F                  147
EXHAUST PRESSURE, IN. H2O               1.0
EXHAUST TEMPERATURE, F                  100

  *  CORRECTED SAE J816B
  +  CORRECTED FOR HUMIDITY
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